(Other instructions on

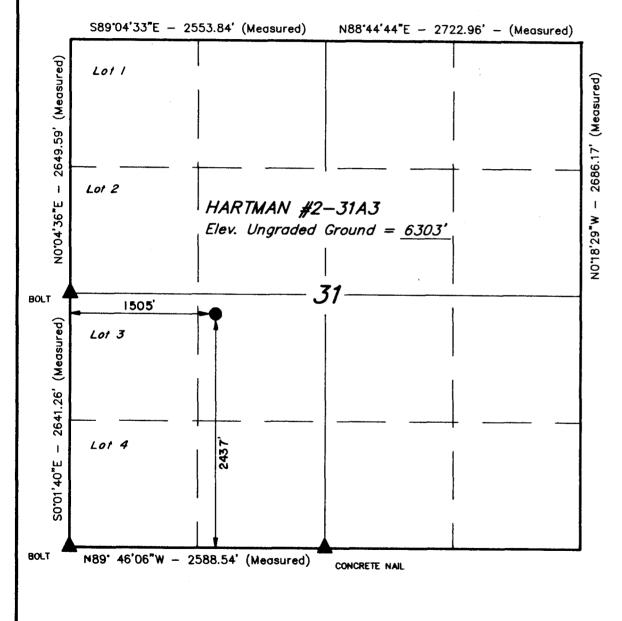
•	S	TATE OF UTA	H (Othe	er instructions on reverse side)	
			AL RESOURCES		5. LEASE DESIGNATION AND SERIAL NO.
	DIVISION O	F OIL, GAS,	AND MINING		Fee Land
	N FOR PERMIT	TO DRILL,	DEEPEN, OR PL	.UG BACK	6. IF INDIAN, ALLOTTER OR TRIBE NAME
1a. TYPE OF WORK	ILLXXXX	DEEDEN		C DACK []	7. UNIT AGREEMENT NAME
b. Type of well	ILL-T-J	DEEPEN	L PLU	G BACK 🗌	
WELL XXX	VELL OTHER		SINGLEXXXX	MULTIPLE ZONE	8. FARM OR LEASE NAME
2. NAME OF OPERATOR	1171111	·			Hartman
	loration & Pi	coduction	Company 7	THE PERSON	9. WELL NO.
	3. ADDRESS OF OPERATOR				2-31A2
P.O. Box 290	Neola, U	Jtah 84053		The second	10. FIELD AND POOL, OR WILDCAT
At surface	leport location clearly an	d in accordance wi	th any State requirement	!"S'1989 🕮	Bluebell Wasatch
At proposed prod. zoi	12T % T202.	rwr.			11. SEC., T., R., M., OR BLK. NESW
	SAME		OH BAC	ON OF A semmo	Sec. 31, T1S, R3W.
	AND DIRECTION FROM NEA		T OFFICE.	W INSUMP	12. COUNTY OR PARISH 18. STATE
	iles Southeas				Duchsene VT
15. DISTANCE FROM PROPE LOCATION TO NEAREST	2040		16. NO. OF ACRES IN L.	EASE 17. NO. O	F ACRES ASSIGNED
PROPERTY OR LEASE I	g. unit line, if any)	15'	640		640
18. DISTANCE FROM PROPOSED LOCATION. TO NEAREST WELL, DRILLING, COMPLETES, 149. OR APPLIED FOR, ON THIS LEASE, FT. 19. PROPOSED DEPTH 14,500. ROTARY OR CABLE TOOLS ROTARY					
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6303 GL (UNGRADED) 22. APPROX. DATE WORK WILL START 8-18-89					22. APPROX. DATE WORK WILL START® 8-18-89
23.		PROPOSED CASI	NG AND CEMENTING P	ROGRAM	-
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F		TH	QUANTITY OF CEMENT
13 3/4"	10 3/4"	51 & 40.5			3550 ft3
8 3/4"	7"	23,26,29	14,500'		2700 ft3
1. Enclosed	attachments:	b. Drill c. BOP S d. Map s	ing Plan. chematic. howing roadwatic showing	ay to well rig lay	site. out on wellsite. e cross-sections.
2. Temporar	y Water Permi	t No. t89	-43-12.		

- And AFE has been prepared and sent to partners for approval. 3.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED Toes W. A.	358-4397 Home	(801) 789-8204 Petroleum Engineer	B-14-89
(This space for Federal or State of PERMIT NO.		APPROVAL DATE	
APPROVED BY	TITLE		DATE

T1S, R3W, U.S.B.&M.



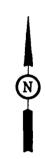
 \triangle = SECTION CORNERS LOCATED.

PENNZOIL EXPLR. & PROD. CO.

Well Location, HARTMAN #2-31A3, located as shown in the NE 1/4 SW 1/4 of Section 31, T1S, R3W, U.S.B.&M. Duchesne County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE WEST 1/4 CORNER OF SECTION 31, T1S, R3W, U.S.B.&M. TAKEN FROM THE ALTAMONT QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6317 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLATING PREPARED FROM
FIELD NOTES OF ACTUAL SURVEYS MADE TO THE OR UNDER MY
SUPERVISION AND THAT THE SAME ARE THE AND CORRECT TO THE
BEST OF MY KNOWLEDGE AND BELIFF

REGISTER D LAND SURVEYOR REGISTRATION NO. 5709

UINTAH ENGINEERING & LAND SUNVEYING P. O. BOX 1758 - 85 SOUTH - 200 EAST VERNAL, UTAH - 84078

SCALE 1" = 1000'	DATE 8-12-89		
PARTY D.A. D.S. T.D.H.	REFERENCES PREVIOUS BREAKDOWN		
WEATHER CLEAR, HOT	FILE PENNZOIL EXPLR. & PROD. CO.		

OPERATOR:....PENNZOIL COMPANY WELL:....Hartman No. 2-31A3 WELL LOCATION:.2437' FSL, 1505'FWL

SENW Section 31, T1S, R3W Duchesne County, Utah

1. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL FORMATIONS:

Duchesne River Green River Trona MB H K (CP70) WASATCH TAP Hi CP 200 CP 216	at surface 5,730' 7,500' 8,330' 9,740' 11,060' 11,370' 12,230' 13,155' 13,130'	(surface	formation)
Total Depth	14,500'		
_	•		

2. ESTIMATED OIL & WATER DEPTHS:

- 3. PROPOSED CASING PROGRAM:
 - A. 20" conductor to be set and cemented at a proposed depth of 60'.
 - B. 10 3/4", 51 & 45.5#, N-80/K-55, LT&C to be set and cemented at a proposed depth of 5,000'+.

Cement: Low density filler cement to surface. Tail-in with 250 sks Cl "G" or "H" tailored for depth and Temp.

C. 7", 23, 26 & 29#, P-110/S-95/N-80, LT&C/BUTT to be set and cemented at a proposed depth of 14,500'+.

Cement: Low density filler cement to surface. Tail in with Cl "G" or "H" tailored to depth and temperature.

IF NEEDED:

D. 5", 18#, P-110, integral joint, liner to be set and cemented from 11,100' to 14,500'.

Cement: Cl "G" or "H" tailored to depth & temperature.

4, OPERATOR'S PRESSURE CONTROL PLAN;

Figure No. 1 is a schematic of minimum BOP equipment.

The BOP equipment will be nippled up on the surface casing and pressure tested prior to drilling out:

- A. All rams and choke manifold will be tested to 5000Psi.
- B. Bag preventer will be tested to 50% of its rated working pressure.

Record all BOP tests on tour reports.

Retest BOP stack every 28 days.

Before drilling out test surface casing to 0.22 psi per foot of depth or to 3500 Psi whichever is the greatest.

Fill-up line above the Bag Type Preventer.

Kill line located below the BOP rams.

Operational Checks:

Pipe rams will be closed and opened once each 24 hours.

Blind rams will be closed and opened each time the drill string is pulled from the well bore.

Auxiliary well control and monitoring equipment:

- A. Upper and lower kelly cocks will be utilized.
- B. A full-opening drill pipe stabbing valve with proper drill pipe fittings will be utilized when the kelly is not in the string.
- C. PVT equipment will be used to monitor the mud system from the top of the transition zone to Total Depth.

- 5. PROPOSED DRILLING FLUID PROGRAM:
 - A. Conductor & surface hole: Drill with clean fresh water. Drill solids will be flocculated with Lime to keep the water clean.

Should a water flow be encountered, it will be controlled with fresh water mud and drilling will continue.

B. Productive interval: Start drilling this interval with fresh water. Use viscous sweeps to keep the well bore clean and a flocculent to keep the water clean. Below 6,000' carry 5000PPM Chlorides in the drilling fluid.

When well bore conditions dictate (tight hole, bridging & etc.) mud up will be with a low solids, non-dispersed drilling fluid.

Final fluid properties: 13.0/13.5#, 35/45 Vis, 10/12 WL.

WELL BORE EVALUATION:

- a. DRILL STEM TESTING:.....None planned.
- C. LOGGING: Surface Hole:.....None.

Productive interval:....DIL-GR
FDC-CNL
BHC-SONIC

D. COMPLETION: The objective formation is the Wasatch. Selected zones will be perforated and evaluated for stimulation work.

DRILLING PLAN

Page 4 of 4

7. PRESSURES & TEMPERATURES:

A. PRESSURE:

At Total Depth (14,500'+) the mud weight will probably be 13.5# and the formation pressure 10,180 Psi.

B. TEMPERATURE:

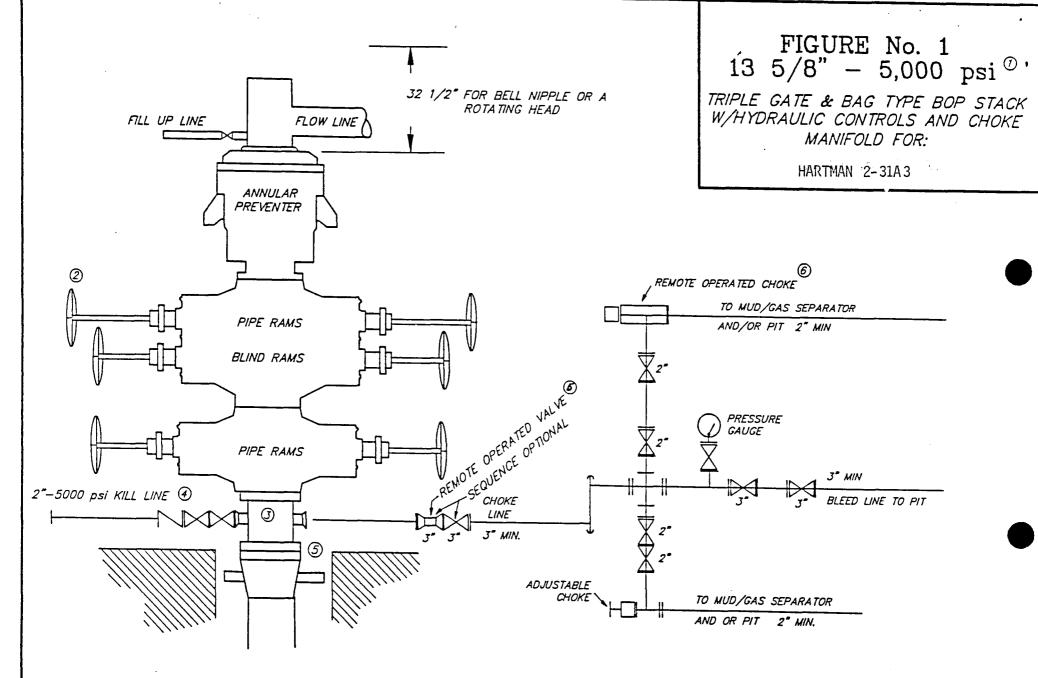
Temperatures are normal for this area and well depth, probably 235 to 250 degrees at 14,500'.

8. ANTICIPATED STARTING DATE:

Construction of road and location will probably start within five (5) to ten (10) days of permit approval.

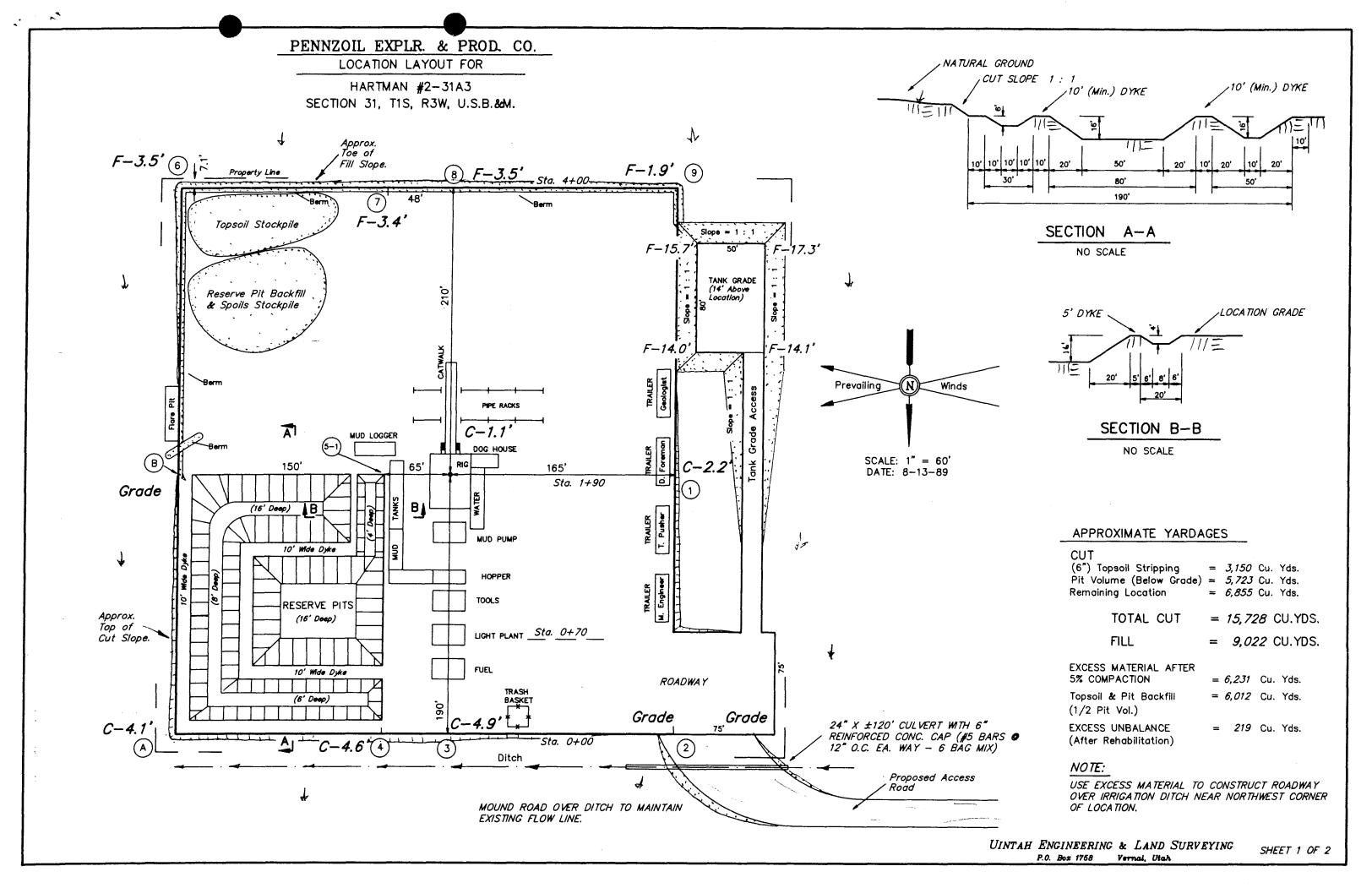
9. This well will be drilled per regulations as set forth by the:

State of Utah Natural Resource Oil, Gas & Mining Division



- ① = ALL BOP CONNECTIONS SUBJECTED TO WELL PRESSURE SHALL BE FLANGED, WELDED OR CLAMPED.
- 2 = HAND WHEELS FOR EACH SET OF RAMS UNLESS EQUIPPED WITH AUTO LOCK.
- 3 DRILLING SPOOL UNLESS BOTTOM BOP EQUIPPED WITH SIDE OUTLETS.
- ⊕ = KILL LINE W/2-2" VALVES & 1-2" CHECK VALVE WITH KILL LINE TO OUTER EDGE OF THE SUB STRUCTURE.
- 3 = TOP OF CASING HEAD FLANGE WILL BE AT GROUND LEVEL
- 6 = REMOTE CONTROLS ON RIG FLOOR.

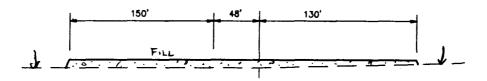




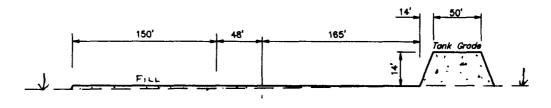
PENNZOIL EXPLR. & PROD. CO.

LOCATION LAYOUT FOR

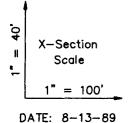
HARTMAN #2-31A3 SECTION 31, T1S, R3W, U.S.B.&M.

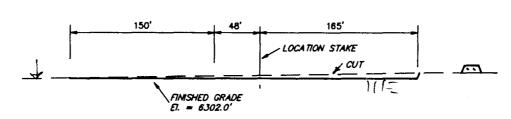


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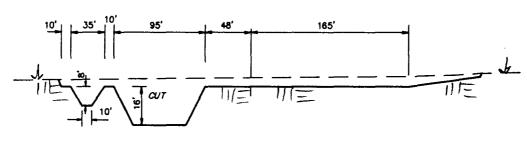


STATION 2+95.00

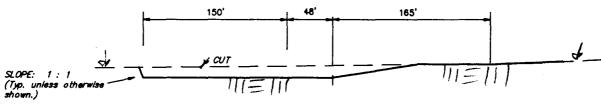




STATION 1 + 90.00



STATION 0+70.00



STATION 0+00

(Other instructions on reverse side)

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL CAS AND MINING

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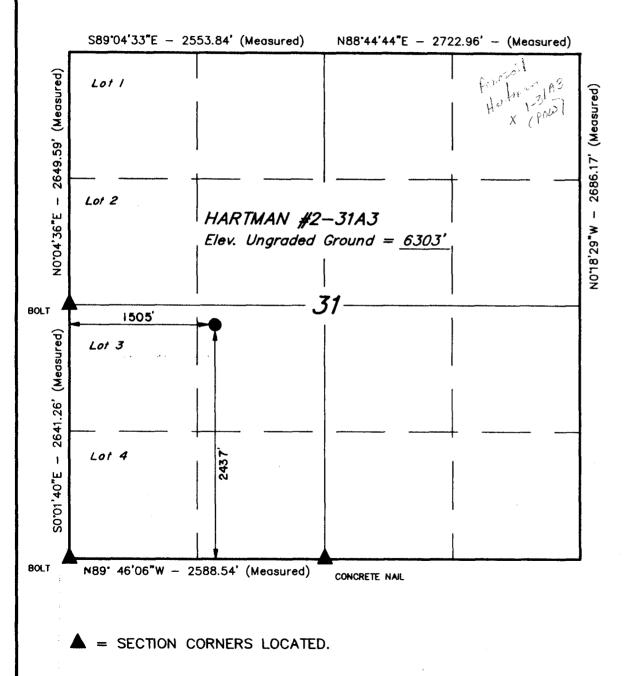
	DIVISION O	F OIL, GAS,	AND MINING		Fee Land
APPLICATION	Y FOR PERMIT	TO DRILL, D	DEEPEN, OR PL	UG BACK	6. IF INDIAN, ALLOTTEE OR TRIBE NAME
1a. TYPE OF WORK b. TYPE OF WELL	*********	ENT		G BACK	7. UNIT AGREEMENT NAME S. FARM OR LEASE NAME
OIL XXX 2. NAME OF OPERATOR	CLN dal	Proc 1 4 1 1	A CAA	ZONE	Hartman
PENNZOIL Exp	loration C Dr	odustion (COMPANY		9. WELL NO.
3. ADDRESS OF OPERATOR	TOTACTON & FI	Oddection	COmpany		2-31A2 2-3/A3
P.O. Box 290	Neola I	Itah 84053	TOTAL SON CONTRACTOR	757777	10. FIELD AND POOL, OR WILDCAT
4. LOCATION OF WELL (R				8.0	Bluebell Wasatch Alfam
At ourings	FSL & 1505'	FWL			11. SEC., T., R., M., OR BLK. NESW
At proposed prod. zon	SAME		22 AUG 151	333	Sec. 31, T1S, R3W.
14. DISTANCE IN MILES			(1,751) (1) (1)	0F	12. COUNTY OR PARISH 13. STATE
About 1.5 m					Duchsene VT
15. DISTANCE FROM PROPO LOCATION TO NEAREST PROPERTY OR LEASE L (Also to nearest drig	INE. FT. 150		16. NO. OF ACRES IN L. 640	EASE 17. NO. O	F ACRES ASSIGNED 11S WELLO 640
18. DISTANCE FROM PROP TO NEAREST WELL, D OR APPLIED FOR, ON TH	RILLING, COMPLETED, 1	19'	19. PROPOSED DEPTH Wasatch 14,500		ROTARY OB CABLE TOOLS ROTARY
21. ELEVATIONS (Show who 6303 GL (UNG					22. APPROX. DATE WORK WILL START* 8-18-89
23.		PROPOSED CASIN	NG AND CEMENTING P	ROGRAM	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FO	OT SETTING DEF	TH	QUANTITY OF CEMENT
13 3/4"	10 3/4"	51 & 40.5	5,000'		3550 ft3
8 3/4"	7"	23,26,29	14,500'		2700 ft3
1. Enclosed	attachments:	b. Drill: c. BOP Se	ing Plan.		cito

- d. Map showing roadway to wellsite.
- e. Schematic showing...rig layout on wellsite.
 ...wellsite cross-sections.
- 2. Temporary Water Permit No. t89-43-12/43-3170 (Bruce Hartman)
- 3. And AFE has been prepared and sent to partners for approval.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

8IGNED	Office (801) 358-4397		(801) 789-8204 Petroleum Engineer	8-14-89
(This space	43-013-31243		APPROVED E	BY THE STATE DIVISION OF
		TITLE		AND MINING
	OF APPROVAL, IF ANY:		BY: of	Bya,
	*Sa	e Instruction	WELL SPACIN	G: Pausa No. 139-42

T1S, R3W, U.S.B.&M.



PENNZOIL EXPLR. & PROD. CO.

Well Location, HARTMAN #2-31A3, located as shown in the NE 1/4 SW 1/4 of Section 31, T1S, R3W, U.S.B.&M. Duchesne County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION AT THE WEST 1/4 CORNER OF SECTION 31, T1S, R3W, U.S.B.&M. TAKEN FROM THE ALTAMONT QUADRANGLE, UTAH, DUCHESNE COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6317 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAN THE PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE THE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOUR REGISTRATION NO. 5709

UINTAH ENGINEERING & LAND SUNVEYING P. O. BOX 1758 - 85 SOUTH - 200 EAST VERNAL UTAH - 84078

1" = 1000'	DATE 8-12-89		
PARTY D.A. D.S. T.D.H.	REFERENCES PREVIOUS BREAKDOWN		
WEATHER	FILE		
CLEAR, HOT	PENNZOIL EXPLR. & PROD. CO.		

PENNZOIL EXPLORATION AND PRODUCTION COMPANY

P. O. BOX 290 • NEOLA, UTAH 84053 • (801) 353 - 4397

August 14, 1989

State of Utah, Dept of Natural Resources Division of Oil, Gas and Mining 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203 AUG 15 1989

OIL, GAS & MINING

Re: Application for Permit to Drill for:
Hartman No. 2-31A3
2457' FSL & 1505' FWL
NESW Section 31, T1S, R3W
Duchesne County, Utah

Gentlemen:

The original and two copies of captioned APD with attachments are enclosed for your review and I trust your approval. Pennzoil Exploration & Production Company requests that this APD and all related information submitted on this well be held confidential for that period of time as permitted by regulations and law.

Should there be any question, please contact the undersigned.

Sincerely,

Pennzoil Exploration & Production Company

Noel W. Putscher Petroleum Engineer

Enclosure

UT-9

PAGE 1 of 4

DRILLING PLAN

OPERATOR:.....PENNZOIL COMPANY WELL:.........Hartman No. 2-31A3 WELL LOCATION:.2437' FSL, 1505'FWL

SENW Section 31, T1S, R3W Duchesne County, Utah

1. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL FORMATIONS:

Duchesne River	at surface	(surface	formation)
Green River	5,730'		
Trona	7,500'		
MB	8,330'		
H	9,740'		
K (CP70)	11,060'		
WASATCH	11,370'		
TAP Hi	12,230'		
CP 200	13,155'		
CP 216	13,130'		
Total Depth	14,500'		

2. ESTIMATED OIL & WATER DEPTHS:

Water:.....None anticipated Top Green River production...oil @ 6,030' Top Wasatch production....oil @ 11,464'

- 3. PROPOSED CASING PROGRAM:
 - A. 20" conductor to be set and cemented at a proposed depth of 60'.
 - B. 10 3/4", 51 & 45.5#, N-80/K-55, LT&C to be set and cemented at a proposed depth of 5,000'+.

Cement: Low density filler cement to surface. Tail-in with 250 sks Cl "G" or "H" tailored for depth and Temp.

C. 7", 23, 26 & 29#, P-110/S-95/N-80, LT&C/BUTT to be set and cemented at a proposed depth of 14,500' \pm .

Cement: Low density filler cement to surface. Tail in with Cl "G" or "H" tailored to depth and temperature.

IF NEEDED:

D. 5", 18#, P-110, integral joint, liner to be set and cemented from 11,100' to 14,500'.

Cement: Cl "G" or "H" tailored to depth & temperature.

4, OPERATOR'S PRESSURE CONTROL PLAN;

Figure No. 1 is a schematic of minimum BOP equipment.

The BOP equipment will be nippled up on the surface casing and pressure tested prior to drilling out:

- A. All rams and choke manifold will be tested to 5000Psi.
- B. Bag preventer will be tested to 50% of its rated working pressure.

Record all BOP tests on tour reports.

Retest BOP stack every 28 days.

Before drilling out test surface casing to 0.22 psi per foot of depth or to 3500 Psi whichever is the greatest.

Fill-up line above the Bag Type Preventer.

Kill line located below the BOP rams.

Operational Checks:

Pipe rams will be closed and opened once each 24 hours.

Blind rams will be closed and opened each time the drill string is pulled from the well bore.

Auxiliary well control and monitoring equipment:

- A. Upper and lower kelly cocks will be utilized.
- B. A full-opening drill pipe stabbing valve with proper drill pipe fittings will be utilized when the kelly is not in the string.
- C. PVT equipment will be used to monitor the mud system from the top of the transition zone to Total Depth.

UT-10Har

5. PROPOSED DRILLING FLUID PROGRAM:

A. Conductor & surface hole: Drill with clean fresh water. Drill solids will be flocculated with Lime to keep the water clean.

Should a water flow be encountered, it will be controlled with fresh water mud and drilling will continue.

B. Productive interval: Start drilling this interval with fresh water. Use viscous sweeps to keep the well bore clean and a flocculent to keep the water clean. Below 6,000' carry 5000PPM Chlorides in the drilling fluid.

When well bore conditions dictate (tight hole, bridging & etc.) mud up will be with a low solids, non-dispersed drilling fluid.

Final fluid properties: 13.0/13.5#, 35/45 Vis, 10/12 WL.

WELL BORE EVALUATION:

- a. DRILL STEM TESTING:......None planned.
- B. CORING:.....None planned.
- C. LOGGING: Surface Hole:.....None.

Productive interval:....DIL-GR FDC-CNL BHC-SONIC

D. COMPLETION: The objective formation is the Wasatch. Selected zones will be perforated and evaluated for stimulation work.

DRILLING PLAN

Page 4 of 4

7. PRESSURES & TEMPERATURES:

A. PRESSURE:

At Total Depth (14,500'+) the mud weight will probably be 13.5# and the formation pressure 10,180 Psi.

B. TEMPERATURE:

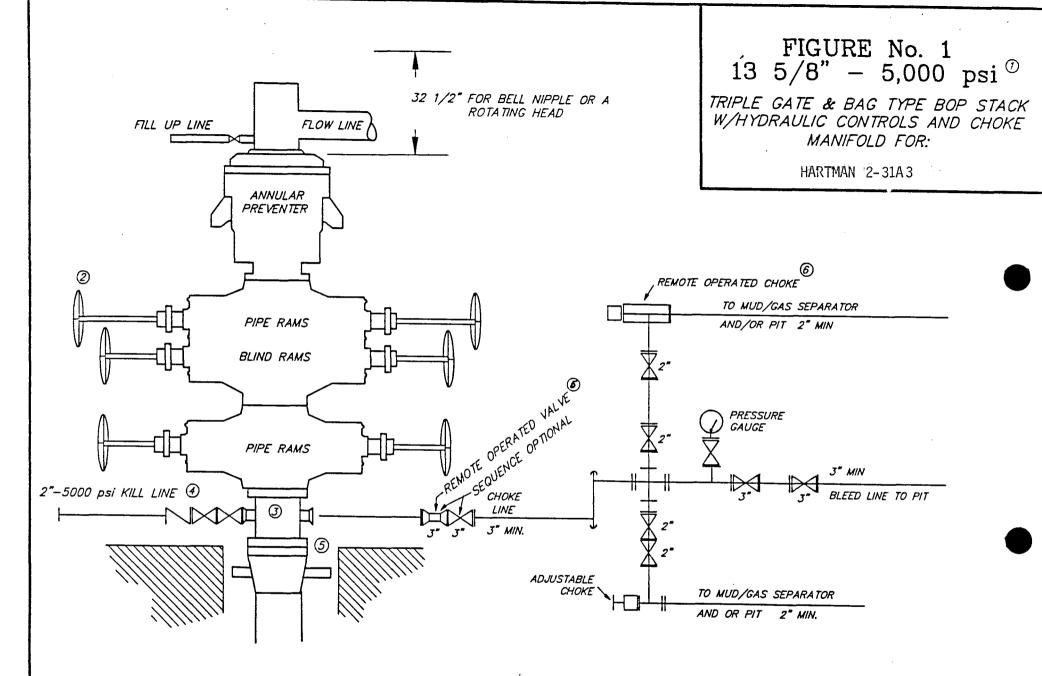
Temperatures are normal for this area and well depth, probably 235 to 250 degrees at 14,500'.

8. ANTICIPATED STARTING DATE:

Construction of road and location will probably start within five (5) to ten (10) days of permit approval.

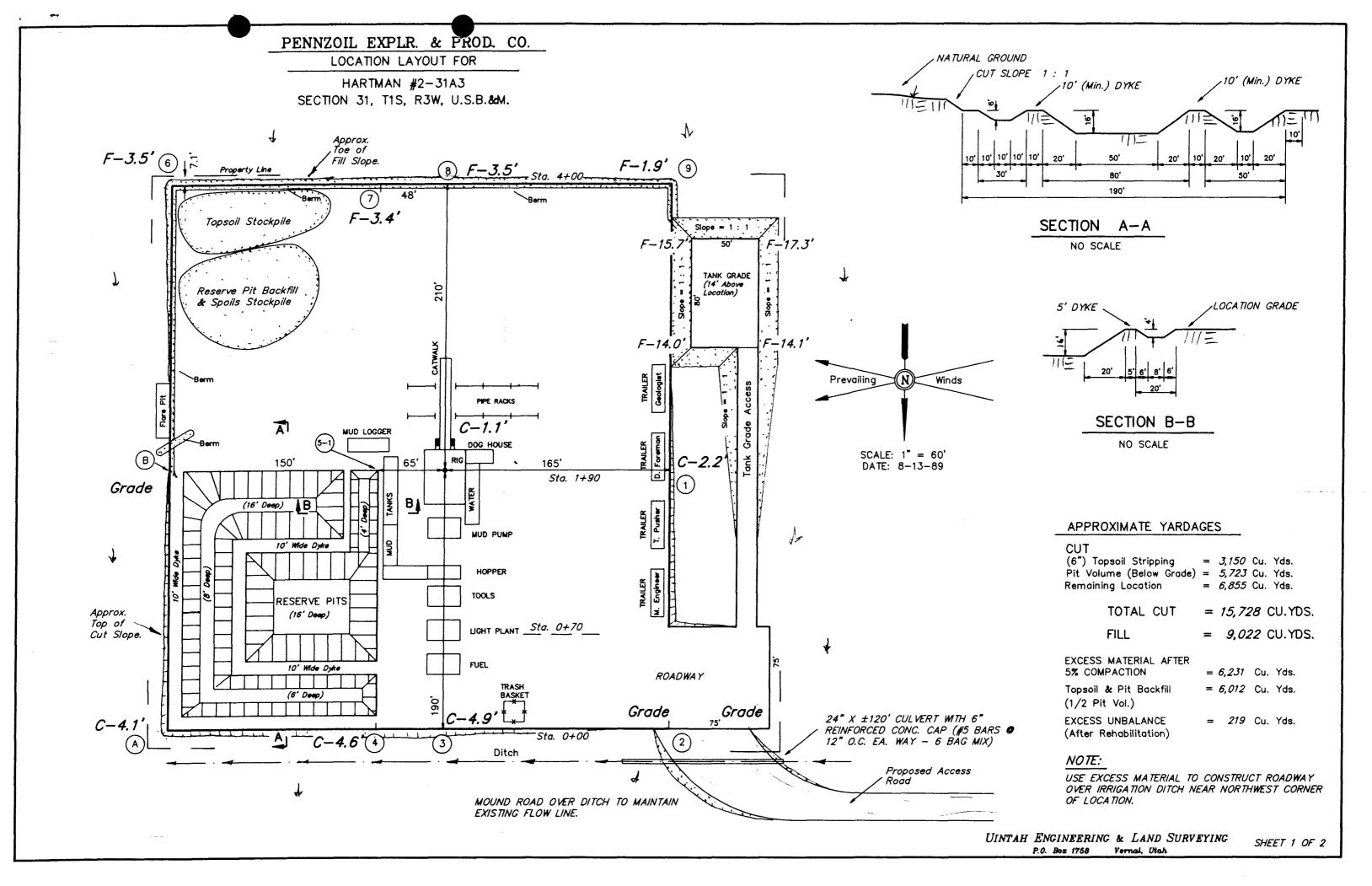
9. This well will be drilled per regulations as set forth by the:

State of Utah Natural Resource Oil, Gas & Mining Division



- 1 = ALL BOP CONNECTIONS SUBJECTED TO WELL PRESSURE SHALL BE FLANGED, WELDED OR CLAMPED.
- 2 = HAND WHEELS FOR EACH SET OF RAMS UNLESS EQUIPPED WITH AUTO LOCK.
- 3 = DRILLING SPOOL UNLESS BOTTOM BOP EQUIPPED WITH SIDE OUTLETS.
- ← KILL LINE W/2-2" VALVES & 1-2" CHECK VALVE WITH KILL LINE TO OUTER EDGE OF THE SUB STRUCTURE.
- (5) = TOP OF CASING HEAD FLANGE WILL BE AT GROUND LEVEL.
- 6 = REMOTE CONTROLS ON RIG FLOOR.

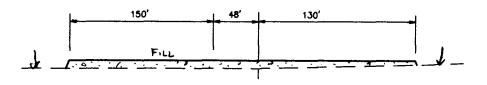




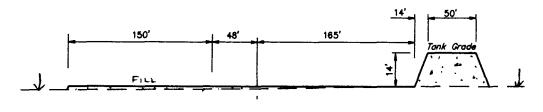
PENNZOIL EXPLR. & PROD. CO.

LOCATION LAYOUT FOR

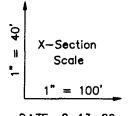
HARTMAN #2-31A3 SECTION 31, T1S, R3W, U.S.B.&M.



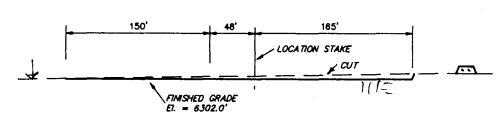
STATION 4+00.00



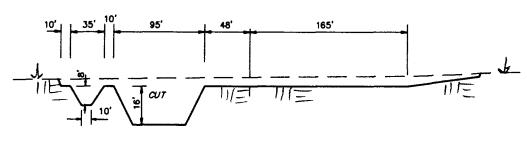
STATION 2+95.00



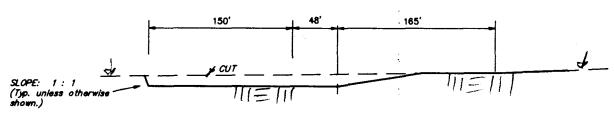
DATE: 8-13-89



STATION 1+90.00



STATION 0+70.00



STATION 0+00

APPLICATION FOR TEMPORARY CHANGE OF WATER

STATE OF UTAH

Kec. by	
Fee Paid \$.	
Receipt # .	
Microfilmed .	
Poll #	

For the purpose of obtaining permission to make a temporary change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Section 73-3-3 Utah Code Annotated 1953, as amended.

TEMPORARY CHANGE APPLICATION NO. t89-43-12

Proposed changes: point of diversion [], place of use [X], nature of use [X].

1. NAME: J. Bruce Hartman

ADDRESS: Pennzoil Company, P. O. Box 290 Neola, UT 84053 Interest: 100%0wns a 55.56% interest in application.

2. FILING DATE: August 9, 1989

3. RIGHT EVIDENCED BY: A7859

HERETOFORE referenced from Water Right: 43-3170

4. FLOW: 0.625 cfs

5. SOURCE: Sand Creek, tributary to Duchesne River

6. COUNTY: Duchesne

7. POINT(S) OF DIVERSION:

(1) S 705 ft. E 534 ft. from N_4 corner, Section 31, T1S, R3W, USBM

Source: North Fork of Sand Creek

(2) S 1573 ft. E 447 ft. from N₄ corner, Section 31, T1S, R3W, USBM

Source: West Fork of Sand Creek

8. NATURE OF USE:

IRRIGATION: Total: 45.00 acres SOLE SUPPLY: 37.37 acres.

PERIOD OF USE: April 1 to October 31

DOMESTIC: 2 Families

PERIOD OF USE: January 1 to December 31

9. PLACE OF USE:

Sec 5, T2S, R3W, USBM

NORTH-EAST: NE NW SW SE	NORTH-WEST 4 NE NW SW SE	SOUTH-WEST 4 NE NW SW SE	SOUTH-EAST:
: : :	: X: X:	::::	: : :

THE FOLLOWING TEMPORARY CHANGES ARE PROPOSED

10. FLOW: 6.0 acre-feet

REMAINING WATER: Same as HERETOFORE

Continued on Next Page

TEMPORARY CHANGE APPLICATION NO. t89-43-12

11. SOURCE: Sand Creek, tributary to Duchesne River

12. COUNTY: Duchesne

COMMON DESCRIPTION: Blood Draw

13. POINT(S) OF DIVERSION: Same as HERETOFORE

14. PLACE OF USE: Changed as follows:

NORTH-EAST | NORTH-WEST | SOUTH-WEST | SOUTH-EAST | NE NW SW SE NE NW SW SE

Sec 31, T1S, R3W, USBM

15. NATURE OF USE: Changed as follows:

OIL EXPLORATION: Drilling and completion of well Hartman 131-A-2.

PERIOD OF USE: August 9, 1989 to August 8, 1990

The undersigned hereby acknowledges that even though he/she may have been assisted in the preparation of the above-numbered application through the courtesy of the employees of the State Engineer's Office, all responsibility for the accuracy of the information contained therein, at the time of filing, rests with the applicant.

Signature of Applicant

DRILLING LOCATION ASSESSMENT

State of Utah Division of Oil, Gas and Mining

OPERATOR: PENNZOIL E&P COMPANY WELL NAME: HARTMAN 2-31A2 SECTION: 31 TWP: 1S RNG: 3W LOC: 2437 FSL 1505 FWL QTR/QTR NE/SW COUNTY: DUCHESNE FIELD: BLUEBELL SURFACE OWNER: Randy Hartman-pad, Bruce Hartman-access SPACING: 660 F SECTION LINE 1320 F ANOTHER WELL INSPECTOR: Brad Hill DATE AND TIME: Aug. 17, 1989, 10:00 AM

PARTICIPANTS: Noel Putscher-Pennzoil E&P

REGIONAL SETTING/TOPOGRAPHY: West-central Uinta Basin, location is on a flat lying area on top of Quaternary age terrace. LAND_USE:

CURRENT SURFACE USE: Agricultural

PROPOSED SURFACE DISTURBANCE: A square shaped pad will be constructed, approximately 400'X 400'. An existing road will be upgraded for about 1500'.

AFFECTED FLOODPLAINS AND/OR WETLANDS: None

FLORA/FAUNA: Fallow oat field.

ENVIRONMENTAL PARAMETERS

SURFACE GEOLOGY

SOIL TYPE AND CHARACTERISTICS: clayey-silt soil with frequent cobbles.

SURFACE FORMATION & CHARACTERISTICS: Quaternary alluvium overlying Duchesne River Formation.

EROSION/SEDIMENTATION/STABILITY: No active erosion or sedimentation. Area is stable.

PALEONTOLOGICAL POTENTIAL: None observed.

SUBSURFACE GEOLOGY

OBJECTIVES/DEPTHS: Green River-6030', Wasatch-11,464'

ABNORMAL PRESSURES-HIGH AND LOW: None anticipated

CULTURAL RESOURCES/ARCHAEOLOGY: N/A

CONSTRUCTION MATERIALS: Onsite materials will be used.

SITE RECLAMATION: If well is P&A the site is to be reclaimed as per landowner instructions.

RESERVE PIT

CHARACTERISTICS: An irregularly shaped reserve pit will be constructed. (see diagram attached to A.P.D.)

LINING: Pennzoil has agreed to line the pit with a suitable synthetic liner.

MUD PROGRAM: Surface and conductor hole will be drilled with fresh water. As hole conditions dictate, mud up will be with a low solids, non-dispersed drilling fluid.

DRILLING WATER SUPPLY: Temporary water permit No. T89-43-12

ATTACHMENTS

Photographs to be placed on file.

BEFORE THE BOARD OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RESOURCES

STATE OF UTAH

IN THE MATTER OF THE AMENDED
PETITION OF ANR LIMITED INC.,
ET AL. FOR AN ORDER MODIFYING
PREVIOUS ORDERS WHICH
ESTABLISHED DRILLING AND
SPACING UNITS AND ANY OTHER
ORDERS RELATING TO TEST WELLS
FOR THE ALTAMONT, BLUEBELL
AND CEDAR RIM-SINK DRAW

FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

Docket No. 85-007 Cause No. 139-42

FIELDS, DUCHESNE AND UINTAH COUNTIES, UTAH

Pursuant to the Amended Notice of Hearing dated March 4, 1985 of the Board of Oil, Gas and Mining ("Board"), Department of Natural Resources of the State of Utah, said cause came on for hearing on Thursday, April 11, 1985 at 10:00 a.m. in the Board Room of the Division of Oil, Gas and Mining ("Division"), 355 West North Temple, 3 Triad Center, Suite 301, Salt Lake City, Utah.

The following members of the Board were present:

Gregory P. Williams, Chairman
James W. Carter
Charles R. Henderson
Richard B. Larson
E. Steele McIntyre
John M. Garr, having recused himself,
did not participate

Mark C. Moench, Assistant Attorney General, was present on behalf of the Board.

Members of the Staff of the Division present and participating in the hearing included:

Dr. Dianne R. Nielson, Director Ronald J. Firth, Associate Director John R. Baza, Petroleum Engineer

Barbara W. Roberts, Assistant Attorney General, was present on behalf of the Division.

Appearances were made as follows: Petitioners ANR Limited, et al., by Frank Douglass, Esq. and Ray H. Langenberg, Austin, Texas; Robert G. Pruitt, Jr., Esq., Salt Lake City, Utah; Frank J. Gustin, Esq., Salt Lake City, Utah; Louis A. Posekany, Jr., General Counsel, and George W. Hellstrom, Esq., ANR Production Company; Phillip K. Chattin, General Counsel, Utex Oil Company; Hugh C. Garner, Esq., for Coastal Oil & Gas Corporation; Phillip William Lear, Esq., for Phillips Petroleum Company; Jeffrey R. Young, Esq., for Bow Valley Petroleum, Inc.; B. J. Lewis, Esq., Vice President, and Robert W. Adkins, Esq., Linnar Energy Corporation; Robert Buettner, Esq., Koch Exploration Company; Lane Jamison, Esq., Sonat Exploration Company; Victor Brown and Robert Brown, Utah Royalty Association; John Harja, Esq., Gulf Oil Corporation; Martin Seneca, General Counsel, Ute Indian Tribe; Assad M. Raffoul, Petroleum Engineer, Bureau of Land Management; John Chasel, on his own behalf; George Morris, Esq., Ute Distribution Corporation; Dr. Gilbert Miller, Conservation Superintendent, Amarada Hess Corporation; and L. A. Pike, Roosevelt, Utah, landowner.

Now therefore, the Board having considered the testimony of the witnesses, John C. Osmond, Petroleum Geologist; Clarke Gillespie, Petroleum Reservoir Engineer; and R. Thayne Robson, Economist, for Petitioners and B. J. Lewis, Vice President, and John W. Clark, Petroleum Engineer, for Linmar Energy Corporation, and the exhibits received at said hearing and being fully advised in the premises, now makes and enters the following:

FINDINGS OF FACT

- 1. Due and regular notice of the time, place and purpose of the hearing was given to all interested parties as required by law and the rules and regulations of the Board.
- 2. The Board has jurisdiction over the matters covered by said notice and over all parties interested therein and has jurisdiction to make and promulgate any order hereinafter set forth.
- 3. The Board has heretofore entered 640 acre drilling and spacing orders for the Lower Green River/Wasatch Formation in Causes No. 139-3, 139-4, 139-5, 139-8, and 139-17 (Altamont Field), Causes No. 131-11, 131-14, 131-24, 131-27, 131-32, 131-33, 131-34, 131-45 and 131-55, (Bluebell Field), and Causes No. 140-6 and 140-7 (Cedar Rim-Sink Draw Field) as to the following described lands:

UINTAH SPECIAL MERIDIAN

Township 1 North, Range 1 West Sections: 19-36 Township 1 North, Range 2 West Sections: 19-36

Township 1 North, Range 3 West Sections 23-26, 35 and 36

Township 1 South, Range 1 East Sections: All (except Roosevelt Unit)

Township 1 South, Range 2 East Sections: 4-8,18-19, 30-31

Township 1 South, Range 1 West Sections: All (except Roosevelt Unit)

Township 1 South, Range 2 through 4 West Sections: All

Township 1 South, Range 5 West Sections: 10-17, 20-36

Township 1 South, Range 6 West Sections: 25-26, 35-36

Township 2 South, Range 1 through 2 East Sections: All

Township 2 South, Range 1 through 6 West Sections: All

Township 2 South, Range 7 West Sections: 19, 30-36

Township 2 South, Range 8 West Sections: 23-26, 31-36

Township 3 South, Range 3 West Sections: 5-8, 17-20, 29-32

Township 3 South, Range 4 through 8 West Sections: All

Township 4 South, Range 3 West Sections: 5 and 6

Township 4 South, Range 4 West Sections: 1-6

Township 4 South, Range 5 West Sections: 1-6

Township 4 South, Range 6 West Sections: 1-18

SALT LAKE MERIDIAN

Township 5 South, Range 19 East Sections: 20-23, 26-29, 32-35

Township 6 South, Range 19 East Sections: 3-5, 9, 10, 15, 16, 22, 27 and 34

- 4. In Cause No. 140-12, the Board authorized the drilling of test or second wells that may only be produced alternatively with the initial well on the same drilling unit.
- 5. The Lower Green River/Wasatch Formation underlying the subject fields constitutes a pool as that term is defined in Utah Code Ann. §40-6-2(9) (1953, as amended), and is a highly complex series of isolated and discontinuous beds of productive rock that are randomly distributed vertically over a several thousand feet thick interval. Normally, the productive beds are separate and distinct and not in communication with each other.
- 6. Many of the productive beds are not correlatable from well to well and will not afford communication between wells as close as 1000 feet. Of the productive beds that correlate, various geological factors prevent a significant number form communicating between wells within the same section.
- 7. Geologic and engineering information from initial unit wells and test wells show that a single well will not effectively drain the recoverable oil and gas underlying any given 640 acre spacing unit because the productive beds are too

small or have other limiting characteristics precluding effective and efficient drainage of the recoverable reserves underlying the unit.

- 8. Data from production logs and field performance show that test wells drilled under the Order in Cause No. 140-12 after 1978 have caused the recovery of substantial amounts of oil from separate and distinct productive beds and from previously undepleted productive beds, and that the drilling of additional wells on existing units will increase the ultimate recovery of oil from the subject fields.
- 9. The prohibition of simultaneous production from the initial well and test well on the same unit has caused the shutting in of wells with the potential to produce substantial amounts of additional reserves.
- 10. Each additional well drilled under this order will tap producing formations that are separate and distinct from and not in communication with any other producing formation and is not an unnecessary well.
- 11. In some areas of the subject fields, geologic, engineering, and economic factors justify drilling additional wells on existing units. In other areas, geologic, engineering and economic factors may not justify drilling additional wells on existing units.

CONCLUSIONS OF LAW

1. Due and regular notice of the time, place and

purpose of the hearing was given to all interested parties as required by law and the rules and regulations of the Board.

- 2. The Board has jurisdiction over the matters covered by said notice and over all parties interested therein and has jurisdiction to make and promulgate any order hereinafter set forth.
- 3. The Board is authorized to modify its previous orders to permit additional wells to be drilled within established units under Utah Code Ann. §40-6-6(4) (1953, as amended).
- 4. An order permitting (a) the drilling of additional wells on existing units as provided herein and (b) the simultaneous production of initial wells and additional wells will prevent the waste of hydrocarbons, prevent the drilling of unnecessary wells, and protect correlative rights.

ORDER

IT IS THEREFORE ORDERED:

To prevent waste of oil, gas and associated liquid hydrocarbons, to avoid the drilling of unnecessary wells, to protect correlative rights and to maintain, to the maximum extent practicable, drilling units of uniform size and shape for the promotion of more orderly development of the lands described in Finding of Fact No. 3 above, the following order is hereby promulgated to govern operations in said area effective as of April 12, 1985:

- A. Upon the effective date any and all orders of the Board heretofore promulgated which are inconsistent with the orders herein set forth shall be and are hereby vacated to the extent inconsistent herewith.
- B. Additional wells may be drilled, completed, and produced on established drilling units comprising government surveyed sections of approximately 640 acres (or other designated drilling units so long as such unit is at least 400 acres in size) to a density of no greater than two producing wells on each unit comprising a section (or other designated unit).
- C. Additional wells may be drilled at the option of the operator of the unit, based upon geologic and engineering data for that unit which will justify the drilling of an additional well in order to recover additional oil, provided the additional well appears to be economically feasible.
- D. Economically feasible means that a prudent operator would have a reasonable opportunity to recover the costs of drilling, completing, producing and operating the well, plus a reasonable profit.
- E. It is not the intent of this order, in permitting additional wells to be drilled on established drilling units, to change or amend the existing contractual rights or relationships, express or implied, of any parties who share in production or the proceeds therefrom in the spaced area.
- F. Any additional well must be located at least 1,320 feet from the existing well on the unit and not closer than 660

feet from the exterior boundary of the unit. No two wells may be drilled in any drilling unit within the same governmental quarter section or equivalent lot.

- G. If an operator elects to initially complete a well solely within producing formations that are separate and distinct from and not in communication with any other producing formation, the operator will use reasonable precautions in order that such well is not completed in any producing formation that may be effectively drained by any other well.
- H. Second or test wells drilled under previous orders as well as additional wells to be drilled under this order may be produced simultaneously with initial wells.
- jurisdiction of all matters covered by this order and of all parties affected thereby and particularly that the Board retains and reserves exclusive and continuing jurisdiction to make further orders as appropriate and authorized by statute and applicable regulations.

ENTERED this 17 day of April, 1985.

STATE OF UTAH BOARD OF OIL, GAS AND MINING

GRIGORY P. WILLIAMS, Chairman

APPROVED AS TO FORM:

MARK C. MOENCH

Assistant Attorney General

CONMIDENTIAL

	(12885)
OPERATOR Pennzoil Explor.	E. Prod. Co. DATE 8-15-89
WELL NAME Hartman 2-31	A3 (well # Corrected 9/20/89) fur
SEC NESW 31 T 15 R	3W COUNTY Duchesne
43-013-31243 API NUMBER	Fee TYPE OF LEASE
CHECK OFF:	Blanket) BOND NEAREST WELL
LEASE	FIELD POTASH OR OIL SHALE
PROCESSING COMMENTS: Nearest well of under Cause	No. 139-42 (see plat)
	2/43-3170 (Bruce Hartman 8-89 to 8-90)
APPROVAL LETTER:	
SPACING: R615-2-3	WA R615-3-2
139-4 CAUS	12 4-17-85 E NO. & DATE R615-3-3
STIPULATIONS:	
1. Fee Land Stipulati	on
2. The reserve pit	Shall be lined with a Sustable
Synthetic liner Site inspection.	shall be lined with a suitable as agreed upon at the predrill
-	
	CONFIDENT!A! PERIOD
02197	/ END



Division Director

State of Utah DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203 801-538-5340

August 31, 1989

Pennzoil Exploration & Prod. Co. P. O. Box 290 Neola, Utah 84053

Gentlemen:

Re: Hartman 2-31A 3 - NE SW Sec. 31, T. 1S, R. 3W - Duchesne County, Utah 2437' FSL, 1505' FWL

Approval to drill the referenced well is hereby granted in accordance with the Order of Cause No. 139-42 dated April 17, 1985, subject to the following stipulations:

- 1. Pennzoil, as designated operator, is the bonded principal in reference to this Application for Permit to Drill. Should this designation change or a transfer of ownership occur, liability will remain with the designated operator until the Division is notified by letter of a new bonded principal.
- 2. The reserve pit shall be lined with a suitable synthetic liner as agreed upon at the predrill site inspection.

In addition, the following actions are necessary to fully comply with this approval:

- 1. Spudding notification within 24 hours after drilling operations commence.
- 2. Submittal of an Entity Action Form within five working days following spudding and whenever a change in operations or interests necessitates an entity status change.
- 3. Submittal of the Report of Water Encountered During Drilling, Form 7.
- 4. Prompt notification if it is necessary to plug and abandon the well. Notify John R. Baza, Petroleum Engineer, (Office) (80I) 538-5340, (Home) 298-7695, or Jim Thompson, Lead Inspector, (Home) 298-9318.
- 5. Compliance with the requirements of Rule R6I5-3-20, Gas Flaring or Venting, Oil and Gas Conservation General Rules.

Page 2
Pennzoil Exploration & Prod. Co.
Hartman 2-31A3
August 31, 1989

- 6. Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site shall be submitted to the local health department. These drilling operations and any subsequent well operations must be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Division of Environmental Health, Bureau of General Sanitation, telephone (80I) 538-6121.
- 7. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-013-31243.

Sincerely,

Associate Director, Oil & Gas

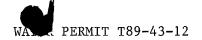
Icr

Enclosures

cc: Bureau of Land Management

D. R. Nielson J. L. Thompson

WE14/1-2



DIVISION OF OIL, GAS AND MINING

SPUDDING	INFORMATION	API NO. 43-013-31243
NAME OF COMPANY: PENNZOIL EXPLORA	ATION & PROD.	CO.
WELL NAME: HARTMAN 2-31A3		
SECTION_NESW 31 TOWNSHIP 1S	RANGE 3W	COUNTY DUCHESNE
DRILLING CONTRACTOR BILL MARTIN		
RIG #unknown		
SPUDDED: DATE 9-12-89		
TIME 10:00 A.M.		
How RAT HOLE		
DRILLING WILL COMMENCE 9-12-89		
REPORTED BY WILBURN LUNA		CONFIDENTIAL
TELEPHONE # (801) 353-4397		WINIE
DATE 9-13-89	SIGNE	D LCR



Division Director

State of Utah department of natural resources division of oil, gas and mining

355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203 801-538-5340

September 29, 1989

Mr. Noel W. Putscher Pennzoil Exploration & Prod. Co. P. O. Box 290 Neola, Utah 84053

Dear Mr. Putscher:

Re: Request for Completed Entity Action Form

This is written to remind you that all well operators are responsible for sending an Entity Action Form to the Division of Oil, Gas and Mining within five working days of spudding a new well. This office was notified that your company spudded the Hartman 2-31A3, API Number 43-013-31243, on September 12, 1989. At this time, we have not received an Entity Action Form for this well.

Please review the instructions on the back of the enclosed form. Make sure you choose the proper Action Code to show whether the well will be a <u>single well</u> with its own sales facilities (Code A), a well being added to an existing group of wells having the same tank battery and common division of royalty interest (Code B - show existing Entity Number to which well should be added), or a well being drilled in the <u>participating area of a properly designated unit</u> (Code B). Complete the form and return it to us by October 8, 1989.

Your attention to this matter is appreciated. If we can be of assistance to you, please feel free to call Lisha Romero at the above number.

Sincerely,

Don Staley

Administrative Supervisor

Ir Enclosure

cc: D. R. Nielson

R. J. Firth

0682S-10

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION	ON API NO. 43-013-31243
NAVE OF COMPANY: PENNZOIL EXPLORATION &	PROD. CO.
WELL NAME: HARTMAN 2-31A3	
SECTION NESW 31 TOWNSHIP 1S RANGE 3	BW COUNTY DUCHESNE
DRILLING CONTRACTOR GRACE DRILLING	
RIG #186	
SPUDDED: DATE 10-10-89	
TIME 2:00 P.M.	
HOWROTARY	
DRILLING WILL COMMENCE 10-10-89	
The contract of the total	
REPORTED BY NOEL PUTSCHER	
TELEPHONE # 353-4397	
	**NOTE (SPUD 9-12-89 WITH RAT HOLE) THIS IS A FOLLOW UP REPORT ONLY!
DATE 10-11-89 SIG	GNED LCR

ACTION	CURRENT	NEW	API NUMBER	WELL NAME						,	
CODE	ENTITY NO.	ENTITY NO.	TW T HORDER	ALL NAME	QQ	sc	WELL TP	LOCATIO RG	COUNTY	SPUD Date	EFFECTIVE
A	99999	11026	4301331243	HARTMAN 2-31A3	NUTES		15	 	Duchesne		09/12/89
WELL 1 C	OMMENTS: F.	e-1:050	Produ	ed 2- 1 1987	11000.0		1.0	101	1 2000 43/00	1071707	1071901
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ACTION CO	DES (See in	structions	on back of form)						C 4 . A		

NOTE: Use COMMENT section to explain why each Action Code was selected.

D - Re-assign well from one existing entity to a new entity

C - Re-assign well from one existing entity to another existing entity

A - Establish new entity for new well (single well only)
B - Add new well to existing entity (group or unit well)

E - Other (explain in comments section)

(3/89)

DIVISION OF OIL, GAS & MINING

OCT 10 1989

Elizabeth O. Jaylor Signature

accountant Title

10/9/84

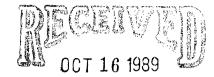
ne No. 1713, 546-6969

STATE OF UTAH DIVISION OF OIL, GAS AND MINING DRILLING AND WELL PLUGGING INSPECTION FORM

COMPANY: PENNZUIL EXPLORATION + PROBU	CTION
WELLNAME: HARTMAN Z-31A3 API# 4	
SECTION: 31 TWP: 15 RANGE:	3W
INSPECTOR: GARY GARNER TIME: 10:	
REPRESENTATIVE: NOEL PUTSCHER PUSHER:	
OPERATIONS: DRILLING	
SPUD DATE:DEPTH:	1015
DRILLING AND COMPLETIONS:	
APDWELL SIGN	SANITATION
BOPEBLOOIE LINE	H2S
	FLARE PIT
BURN PIT HOUSEKEEPING	
PLUGGING AND ABANDONMENTS:	
PLUG TYPE	INTERVAL
	-
PLUGS TESTED: HOW	WOC
MARKER: SURFACE PLATE	
RECLAMATION:	
CONTOUR RIP REHAB	
LEGEND: (Y)-YES (P)-PROBLEM (U)-UNKNOWN (BLANK)-	NOT APPICABLE
REMARKS:	
APPROVED BY HOW	DATE

PENNZOIL EXPLORATION AND PRODUCTION COMPANY

P. O. BOX 290 • NEOLA, UTAH 84053 • (801) 353 - 4397



October 13, 1989

DIVISION OF OIL, GAS & MINING

State of Utah, Dept. of Natural Resources Division of Oil, Gas and Mining 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, UT. 84180-1203

Re: Hartman No. 2-31A3 NESW Section 31, T1S, R3W Duchesne County, Utah API No. 43-013-31243

Gentlemen:

Please return the Form 5 "SUNDRY NOTICES & REPORTS ON WELLS" dated October 2, 1989. There will be no change in plans for the 10 3/4" surface casing as it will be set @ 5000'.

Should there be any questions, please contact the undersigned at (801) 353-4397.

Sincerely,

Pennzoil Exploration & Production Company

Wilburn L. Luna

Drilling Superintendent

WLL/jm

STATE OF UTAH

	MENT OF NATURAL RESO		5. LEASE DESIGNATION	AND ASSIAL NO.
DIVISIO	ON OF OIL, GAS, AND MI	WE CENTRE	Fee Land	
SUNDRY NOT (Do not use this form for propos Use "APPLICA	ICES AND REPORTS	NIMERES OF ICI	. IF INDIAN, ALLOTTE	B OR TRIBE NAME
I. OIL IX GAS	66	10:1 × 11 1909	7. UNIT AGREEMENT NA	EMI
WELL OTHER NAME OF OPERATOR		DIVISION OF	8. FARM OR LEASE NAME	43
PENNZOIL Exploration	& Production Company	OIL, GAS & MINING	Hartman	
S. ADDRESS OF OPERATOR	a, Utah 84053		9. WELL NO. 2-31A3	
4. LOCATION OF WELL (Report location di See also space 17 below.)		State requirements.*	10. FIELD AND POOL, 0	
2437' FSL & 1505' FWL			Altamont/Wa 11. BBC. T. E. M. OB I BURYDY OR ARBA NESW	DLE. AND
			Sec. 31, T1S	
14. APT NUMBER 43-013-31243	Graded GL 6302.6	· · · · · · · · · · · · · · · · · · ·	12. COUNTY OR PARISH Duchesne	Utah
16. Check Ap	propriate Box To Indicate N	ature of Notice, Report, or O	ther Data	
NOTICE OF INTENT	mon to:	UPREUS	ENT REPORT OF:	
TEST WATER SHUT-OFF	ULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING V	
	EULTIPLE COMPLETE	FRACTURE TREATMENT SHOOTING OR ACIDIZING	ALTERING C	
	HANGE PLANS	(Other)	,	
	ame X	(Norm: Report results Completion or Recomple	of multiple completion tion Report and Log for	m.)
17. DESCRIBE PROPOSED OR COMPLETED OPER proposed work. If well is direction nent to this work.) *	tations (Clearly state all pertinent amily drilled, give subsurface locations)	t details, and give pertinent dates, i ions and measured and true vertical	including estimated dat depths for all markers	e of starting any i and zones perti-
It is requested t	hat:			
The Hartman No.	2-31A2 with API	No: 43-013-31243		
Well name to be c	hanged to:		OIL AND	GAS
Hartman No. 2-3	1A3 with APT No:	43-013-31243	DRN	RJF
nareman no. 2 3	1113 WICH HILL ING		/JRB /	GLH
		<i>,</i> *	DTS	S LS
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18. I hereby certify that the foregoing is		lling Superintendent	DATE 10/19/	/89
SIGNED WITDUTTE LUNG				
(This space for Federal or State office		APPROVED BY	i i i i i i i i i i i i i i i i i i i	
APPROVED BY	NI:	OFITTALE	TPESTATE	red to a

*See Instructions on Revenue Side

PENNZOIL EXPLORATION AND PRODUCTION COMPANY

P. O. BOX 290 • NEOLA, UTAH 84053 • (801) 353 - 4397

October 19, 1989

State of Utah, Dept. of Natural Resources Division of Oil, Gas and Mining 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, UT. 84180-1203 RECEIVED OCT 20 1989

> DIVISION OF DIL., GAS & MINING

Re: Report on Change in Well Name Hartman No. 2-31A2 to Hartman No. 2-31A3 NESW Section 31, T1S, R3W Duchesne County, Utah API No. 43-013-31243

Gentlemen:

Enclosed, please find the original and three (3) copies of your Form 5 "SUNDRY NOTICES & REPORTS ON WELLS" for captioned well name change.

Should there be any questions, please contact the undersigned at (801) 353-4397.

Sincerely,

Pennzoil Exploration & Production Company

Wilburn L. Luna

Drilling Superintendent

Enclosure

WLL/jm

STATE OF UTAH DIVISION OF OIL, GAS AND MINING CEMENTING OPERATIONS

COMPANY NAME: PENNZOL EXPLORATION
WELL NAME: HARTMAN Z-31AZ
QTR/QTR SECTION 31 TOWNSHIP 15 RANGE 2W
CEMENTING COMPANY: DOWELL WELL SIGN YES
INSPECTOR: GARY GARNER DATE: 10 23 89
CEMENTING OPERATIONS:
PLUGBACK: SQUEEZE: CASING: P-A ZONE:
SURFACE CASING:INTERMEDIATE PROD CASING:
PERFORATIONS SQUEEZE PRESSURE
CASING INFORMATION: K-55 /N-80
SIZE 103/4 GRADE: #51 HOLE SIZE: 133/4 DEPTH: 5014
SLURRY INFORMATION:
1. CLASS: G- 35/cs Pos. 6º10 GEL, 10# Sk Kolite, 145k Flakes, 2º10 Cacl LEAD: 800 5ks 12.1 TAIL:
2. SLURRY WEIGHT: 35/65 Pos. 6% gel. 1/4 sk flakes, 2% lack LEAD: 1550 sks TAIL:
3. WATER (GAL/SK) 25/75 POZ, Yu SK Flakes, 2% call LEAD: 300 Sks TAIL:
4. COMPRESSIVE STRENGTH PSI @ HR
PIPE CENTRALIZED CEMENTING STAGES
LOST RETURNS BARRELS LOST
TOP OF CEMENT Surface PERF INTERVAL
CEMENT TO SURFACE? VES
ADDITIONAL COMMENTS: cement Fell back to "350" - 1" @ 2pm 10/24/8

Dulg

STATE OF UTAH DIVISION OF OIL, GAS AND MINING DRILLING AND WELL PLUGGING INSPECTION FORM

COMPANY: PENN	ZOIL EXPLORA	710N	
WELLNAME: HARTMA	N 2-31AZ	API#	43-013-31243
SECTION: 31	WP: 15	RANGE:	ZW
INSPECTOR: GARY G	•		
REPRESENTATIVE: NOEL	_		E.C. SHERHAN
OPERATIONS: DRILL			
SPUD DATE:		DEPTH:	4989'
DRILLING AND COMPLETION	INS:		
APD	WELL SIG	N	SANITATION
80PE	✓ BLOOIE L	INE	H2S
VENTED/FLARED	RESERVE	PIT	FLARE PIT
BURN PIT	/HOUSEKEE	PING	
PLUGGING AND ABANDONME	ENTS:		
PLUG TYPE			INTERVAL
		· •	
PLUGS TESTED:	HOW		WOC
MARKER: SURF	FACE	PLATE	
RECLAMATION:			
CONTOUR	RIP	REHAB	
4.4		/=	NOT 40770404 F
LEGEND: (Y)-YES (P)-PF	ROBLEM (U)-UNKNO	IWN (BLANK)	-NOT APPICABLE
REMARKS:			
· · · · · · · · · · · · · · · · · · ·			
APPROVED BY	HOW		DATE

STATE OF UTAH DIVISION OF OIL, GAS AND MINING BOPE TEST INSPECTION FORM

COMPANY: Lemmoil Co. REPRESENTATIVE: Doel Putscher.
WELL NAME: Hartman 2-3/43 API# 43-013-3/243
QTR/QTR NESSW SECTION 31 WELLSIGN V TWP 15 RANGE 3W
INSPECTOR: JM + GARYGARNOR DATE: 10/05/89
DRILLING CONTRACTOR <u>Stace Willing</u> RIG # 186
RIG OPERATIONS: BOP fest after wining 10th burfuel wining
DEPTH 5011/ LAST CASING 103/1 @ 5014
TEST BY Double Jack WATER MUD
PRESSURE RATING OF STACK 5000 psi H2S RATED
TEST PRESSURES 50001 - KELLYCOCK: UPPER _ LOWER _
INSIDE BOP FULL OPENING VALVE ON FLOOR
WRENCH FOR FULL OPENING VALVE/KELLYCOCK ON FLOOR
STACK - LISTED AS ARRANGED - TOP TO BOTTOM:
1. annular
2. Blind Nams
3. Lipe same
4. Pipe sams
5. Deilling Spool
6. July ac hangeline
ADDITIONAL COMMENTS: 5000 par for 15 min except for
annular 3500 pri for 15 min.
REPORTED BY: <u>Moel Putscher</u> PHONE: 353-4397
DATE: 10/25/89 SIGNED: APP) atteleus
(IF TESTED BY INDEPENDENT COMPANY, ATTACH COPY OF TEST)

0451T

STATE OF UTAH DIVISION OF OIL, GAS AND MINING DRILLING AND WELL PLUGGING INSPECTION FORM



COMPANY: PENNEOIL	EXPLORATION)	
WELLNAME: HARTHAN	2-31AZ	API# 4 :	3-013-31243
SECTION: 31 TWP	:15	RANGE:	zw
INSPECTOR: GARY GA			DATE: u/8/89
REPRESENTATIVE: NOEL	PUTSCHER	PUSHER:	· · · · · · · · · · · · · · · · · · ·
OPERATIONS: DRILLING	-		
SPUD DATE:	·	DEPTH:	1228
DRILLING AND COMPLETIONS	:		
APD	WELL SIG	N	SANITATION
✓ BOPE	BLOOIE L	INE	H2S
VENTED/FLARED	RESERVE	PIT	FLARE PIT
BURN PIT	HOUSEKEE	PING	
PLUGGING AND ABANDONMENT	S:		
PLUG TYPE			INTERVAL
		· •	
PLUGS TESTED:	HOW		WOC
MARKER: SURFAC	E	PLATE	
RECLAMATION:			
CONTOUR	RIP	REHAB	
LEGEND: (Y)-YES (P)-PROB	LEM (U)-UNKNO	WN (BLANK)-I	NOT APPICABLE
REMARKS:			
			·
APPROVED BY	HOW		DATE

STATE OF UTAH DIVISION OF OIL, GAS AND MINING BOPE TEST INSPECTION FORM

DEC 04 1939

BOPE	TEST INSPECTION FORM ON SHOW OF
COMPANY: PENNZOIL	REPRESENTATIVE: DANNY LEHMAN
WELL NAME: HARTMAN 2-31 A 3	API NO.: 4301331243
QTR/QTR: SECTION: 31	WELL SIGN:YTWP: 1 SRANGE: 2 W
INSPECTOR: CAROL KUBLY	DATE:_11/30/89
DRILLING CONTRACTOR: GRACE DRI	ILLING RIG #: 186
RIG OPERATIONS:_LOGGED INTERME	EDIATE - 30 DAY BOP TEST
DEPTH: 12,600'	LAST CASING: SFC CSG AT:
TEST BY: DOUBLE JACK	WATER: AND METHANOLMUD:
PRESSURE RATING OF STACK: 5000	H2S RATED: YES
TEST PRESSURES: _5000#/_2500#	*_KELLYCOCK: UPPER_YESLOWER_YES
INSIDE BOPE: YESFULL OF	PENING VALVE ON FLOOR: YES
WRENCH FOR FULL OPENING VALVE	/ KELLYCOCK ON FLOOR: YES
STACK - LISTED AS ARRANGED - T	TOP TO BOTTOM:
1ROTATING	HEAD
2. HYDRIL	an and god took were not took took god took they may some the took god took
3BLIND RAM	15
4. PIPE RAMS	
5SPOOL	
6	
ADDITIONAL COMMENTS: TESTED IN	SIDE AND OUTSIDE CHOKE MANIFOLDS, SUPER
CHOKE, UPPER AND LOWER KELLY O	COCK, BLIND AND PIPE RAMS TO 5000# FOR 15 MIN
TESTED HYDRIL TO 2500# FOR 15	MINUTES
REPORTED BY: DANNY LEHMAN	PHONE: 454-3346
DATE: 11/30/89	signed: Carol Hubby

STATE OF UTAH DIVISION OF OIL, GAS AND MINING DRILLING AND WELL PLUGGING INSPECTION FORM

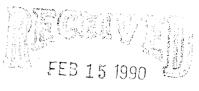
COMPANY: PENNZOIL	EXPL.	
WELLNAME: HARTHAN	Z-3143AP	1# 43-013-31243
SECTION: 31 TWP:	LSRA	NGE: <u>3</u> 心
INSPECTOR: GARYGARNER CH REPRESENTATIVE: NOEL PU		E: Z:30Pm DATE: 12 18 87
OPERATIONS: DRILLING	acec	
SPUD DATE:	DE	PTH: 13091
DRILLING AND COMPLETIONS:		
APD	WELL SIGN	SANITATION
BOPE	BLOOIE LINE	H2S
VENTED/FLARED	RESERVE PIT	FLARE PIT
BURN PIT	HOUSEKEEPING	
PLUGGING AND ABANDONMENTS:		*
PLUG TYPE .		INTERVAL
	-	
PLUGS TESTED: HOW	V	woc
MARKER: SURFACE		PLATE
RECLAMATION:		
CONTOUR	RIP	_REHAB
LEGEND: (Y)-YES (P)-PROBLEM REMARKS:	1 (U)-UNKNOWN (E	3LANK)-NOT APPICABLE
APPROVED BY	HUM	DATE

PENNZOIL EXPLORATION AND PRODUCTION COMPANY

P. O. BOX 290 • NEOLA, UTAH 84053 • (801) 353 - 4397

February 14, 1990

State of Utah, Dept. of Natural Resources Division of Oil, Gas, and Mining 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203



DIVISION OF OIL ASS 2 GROWN

Re: Monthly Operations Report for Drilling

Hartman No. 2-31A3 NESW Sec.31, T1S, R3W Duchesne County, Utah API No. 43-013-31243

Gentlemen:

Enclosed, please find the original and three (3) copies of your DOGM Form 5 " SUNDRY NOTICES & REPORTS ON WELLS" for captioned operations.

Should there be any questions, please contact the undersigned at (801) 353-4397.

Sincerely,

Pennzoil Exploration and Production Company

Wilburn L. Luna

Drilling Superintendent

Enclosure

WLL/dll

} LC3	
J 773	CLA
i nto	SLG
er o San Manager (Manager) as o o d	
1-TAS	
MICE	OFILM
2- FI	LE

SUNDRY I	SION OF OIL, GAS AND MI NOTICES AND REPORTS PROJUDITIES OF BUILD OF THE SUCH PRICATION FOR PERMIT—" for such	ON WELLS	Fee land G. IF INDIAN, ALLOTTEE OR TRIBE NAME
OIL [] GAR [II ER		7. UNIT AGREEMENT HAME
Pennsoil Evaloration	n and Production Company		8. FABN OR LEASE NAME Hartman
ADDRESS OF OPERATOR	r and rroduction company		9. TELL NO.
P.O. Box 290 i. iocation of well (Report localist space 17 below.) At surface	Neola, Utah 84053 atlou clearly and in accordance with an	5 State reguliements 8 15 1990	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
2437 FSL	§ 1505 FWL	ON CAS & AMPLE	11. BEC., T., R., M., OR BLK. AND BURYDT OR AREA NESW
4. PERMIT NO.	15. ELEVATIONS (Show whether		Sec. 31, T.1S, R.3W
43-013-31243		.6 (K.D.B.) 6324.1	Duchesne Utah
	k Appropriate Box To Indicate		Other Data VANT RAPORT OF:
	INTENTION TO:	WATER SHUT-OFF	BETAIRING WELL
FRACTURE TREAT	NULTIPLE COMPLETE	FRACTURE TREATMENT	ALTERING CARING
HILOOT OR ACIDIZE	ARANDON*	Other) Monthly Ope	ADANDONMENT*
(Other)	CHANGE PLANS	(NOTE: Report results	of multiple completion on Well letten Report and Log form.)
	ED OPERATIONS (Clearly state all pertion directionally drilled, give aubaurface loc		. Including estimated date of starting any all depths for all markers and gones perti-
- Drill a 13 3/4" hold Ran 116 jts. (5021. with 2350 sks 35/65 - Cement with 1" pipe Nipple up and test Drill out cement, F 12.98 ppg EMW Drill a 8 3/4" hole Drill a 8 3/4" hole Drill a 8 3/4" hole Log well with DIL-GRan 297 jts. (12,63 Set @ 12,600'. DVT Cement 1st stage wield Run Tracer log and Open DVT @ 8382', a Cement 2nd stage @ with full circulati Nipple down, cut cs Test 7" csg. and DV Drill out DVT, ceme for a 13.86 ppg EMW Drill a 6" hole to Log well with DIL-GRan 51 jts. (2139.9	Poz and 300 sks 25/75 P with 254 sks C1."G" cem BOP stack to 5000 psi (0 .C, G.S., and formation to 5545'. Run formation to 5545'. Run formation to 12,600', with normal R, BHC-SONIC, FMS, and T 5.09) of 7" csg. 32#/29# 8382'. Los returns th 1050 sks c1."G" cemen evaluate same. ttempt to establish circ DVT @ 8382' with 250 sks on g., and nipple up BOP st T to 4000 psi (0.K.) nt, F.C., G.S., and form . T.D. of 14,595' with nor R, and SONIC log. 8') of 5" csg. 18#, N-80 h 145 sks C1."G" cement liner @ 12,453' and ins ith a flow test of 8.3 p	8.4 ppg wt26 vis. No , K-55/N-80, STC. Set a oz. Circulated 106 sks ent, ciculated 11 sks, .K.). Test 10 3/4" csg to 5030'. Run formation leak off test for a 1 problems. Mud @ T.D. emCaliper log/26#/23#, F-110/S-95, I when running csg. t with no circulation. ulation, recovered part Lite cement and 750 slack and test to 5000 ps ation to 12,615'. Run emal problems, Mud @ T.D. emal problems, Mud @ T.D	water flows encountered. and cemented @ 5014' cement, but fell backed. no fall back. to 3500 psi (O.K.). n leak off test for a 1.70 ppg EMW. 11.6 ppg wt45 vis11 wide. BUTT./LTC tial circulation. ks 50/50 Poz cement, si (O.K.) formation leak off test D. 13.7 ppg wt-56 vis7
 Clean out to top of Test top of liner w Pressure test top o Displace well with Run 2000' 2 7/8" tu 	bing, nipple down BOP, n ls and release rig @ 12: RT.		Shut well in.

SEE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING



DIVISIO	ON OF OIL, GAS, AND M	INING	S. LEASE DESIGNATI	DM 7MB SERIES NO.
SUNDRY NOT	ICES AND REPORTS		6. IF INDIAN, ALLOT	TES OR TRIVE NAME
	TION FOR PERMIT—" for men	Proposite Color (No. 18)	7. UNIT AGERMENT	NAMB
ABLT MBTT OLESS			8. PARM OR LEASE	EMAX
Donnadi Emplement	and Draduction Comm	FEB 20 1990		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Pennzoil Exploration	and Production Compa	ny 123 20 1000	Hartman	
P.O. Box 2967, Housto	n. TX 77252	建筑金额	2-31A3	
LOCATION OF WELL (Report location e		7 State regulrements.	10. PIBLD AND POOL	, OR WILDCAT
See also space 17 below.) At surface			Altamont-W	asatch M BLE. AND
2437' FSL and 1505' F	WL (NE¼ SW¼)		Sec 31, T1	s, R3W
14. PERMIT NO.	15. BLEVATIONS (Show whether	DF, RT, GR, 444.)	12. COUNTY OR PAR	ISM 18. STATE
API 43-013-31243			Duchesne	Utah
16. Check Ap		Nature of Notice, Report, o	or Other Data	
TRET WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRIN	
	MULTIPLE COMPLETE	PRACTURE TREATMENT	—	CASING
	ABANDON*	SMOUTING OR ACIDIZING	ABANUON	MENT.
REPAIR WELL	CHANGE PLANS	(Other) monthly r		on on Well
(Other) 17. DESCRIBE PROPOSED OR COMPLETED OPERING PROPOSED WAYL. If well is direction to the mark.)		i a malation of Kec	ominetion report and wa	\$177 GG-7
Monthly progres report 1. Released drilling to the continue building to the continue anchorage and the continue on gas line.	rig 1/11/90. tank battery. rs set 2/8/90.	DENTIAL OIL DEN JIBB DTS	AMD GAS RJF GLH SLS	
DRL 2/13/90		1-TAS	MICROFILM FILE	
SIGNED (This space for Federal or State o		Supervising Engineer		13-90
APPROVED BY	ANY:		DATE	

PETROLEUM CONSULTANTS 888 SOUTH LIPAN, SUITE C DENVER, COLORADO 80223 (303) 936-0161

Divion OIL, GAS & MINING

March 12, 1990

Utah Oil, Gas, & Mining

355 West North Temple

Suite 350

Salt Lake City, UT 84180

From: Marjorie A. Pirece

EDWARD ENGINEERING 888 South Lipan Denver, CO 80223

RE:

Transmittal of Geological Report

Pennzoil Company Hartman 2-31A3

Bluebell-Altamont Field

Duchesne Co., Utah

43.013-31243

I have enclosed a copy of the geological report for the Pennzoil Hartman 2-31A3, located in Section 31, T1S, R3W, of Duchesne Co., Utah for your information. If you have any questions please do not hesitate to contact me at one of these phone numbers:

> 303-936-3423 Denver Office 303-466-6277 Home

Sincerely,

Marjorie A. Pierce



L, GAS & MINING

PENNZOIL COMPANY

Hartman 2-31A3

NESW Section 31, T1S, R3W Bluebell - Altamont Field Duchesne Co., Utah

> EDWARD ENGINEERING Marjorie A. Pierce Geological Engineer

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- II. Geologic Summary
- III. Electric Log Tops
 - IV. Summary of Potential Productive Intervals Recommended for Perforation
 - V. Drilling and Logging Summary
- VI. Daily Log of Operations
- VII. Bit Record
- VIII. Mud Record
 - IX. Distribution of Records
 - X. Drilltime Log

WELL SUMMARY - HARTMAN 2-31A3

OPERATOR:

Pennzoil Company

LEASE:

Hartman 2-31A3

LOCATION:

Field: Bluebell-Altamont Field Legal: NESW Section 31, T1S, R3W

2437' FSL, 1505' FWL

County: Duchesne County, Utah

ELEVATION:

Ground Level: 6303' Kelly Bushing: 6324'

SPUD DATE:

10 October 1989

CEASE DRILLING: 1 January 1990

TOTAL DEPTH:

14,600' Driller

14,595' Steel Line Measure

14,596' Logger

14,595' Final Total Depth

CASING PROGRAM:

10 3/4" Surface Casing set at 5014' 7" Intermediate Casing set at 12,600' 5" Production Liner set at 14,593'

MUD PROGRAM:

Mud Company: M-I Drilling Fluids Co. Mud Engineer: Phil McClure, Kenny Bascom

Mud Type: Gel-Lime: surface - 208' Water: 208'- 11,000'

Poly Plus G: 11,000'- 14,600'

SAMPLE PROGRAM:

Caught: 30' surface - 5,500' 10' 5,500' - 14,600'

Examined: 5,500' - 14,600' by mudloggers verified

by wellsite geologist

Mudlogging: Rocky Mountain Geo-Engineering

24 hour - 2 man unit 5500'-11,985' 12 hour - 1 man unit 11,985'-14,600'

FID total gas detection

FID Chromatography

Mudloggers: Phil Littlefield, Don Phares

CONTRACTOR:

Grace Rig No. 186

Toolpushers: Charles Cruth, E.L. "Bo" Sherman,

Kenny Cruth, Jack Case, Kim White

Drillers: W.C. Wilson, Jerry Johnson,

Alvin Nielsen, Al Guffey, Tim Heins

ELECTRIC LOGGING: Schlumberger

Run 1: Engineer: Jeff Gebhart

Log Types: Dual Laterolog

5010'- 12,603'

Gamma Ray

surface- 12,603'

Digital Sonic

5010'- 12,603'

Digital Sonic Waveforms

5700'- 12,603'

Temperature Log

357'- 12,603'

4-Arm Caliper Log (BGT)

5010'- 12,430'

Formation Microscanner (FMS)

selected intervals

6100'- 12,100'

Temperature Log (Drillpipe)

5970'- 10,170'

Run 2: Engineer: Jeff Gebhart

Log Types: Dual Induction - SFL

12,602'- 14,590'

Gamma Ray

12,602'- 14,590'

Digital Sonic

12,602'- 14,552'

Digital Sonic Waveforms

12,602'- 14,552'

WELLSITE SUPERVISOR: Danny Laman, W.M. Smith - "Smitty",

Noel Putscher, Bill Ryan, Jack Parrot

WELLSITE GEOLOGIST: Marjorie A. Pierce

GEOLOGIC SUMMARY - HARTMAN 2-31A3

The Pennzoil Company Hartman 2-31A3 was drilled as a Wasatch test in the NESW of Section 31, T1S, R3W of Duchesne County, Utah. The Hartman 2-31A3 was drilled to a total depth of 14,600 feet. The well penetrated 142 feet below the top of the Three Fingered Lime and 120 feet below show #32 at 14,476 feet, the last show encountered in the Hartman 2-31A3. The Hartman 2-31A3 well is surrounded by Wasatch and Green River producers.

The Hartman 2-31A3 penetrated 5,946 feet of the Uinta and Duchesne formations, followed by approximately 6,038 feet of Green River formation, and 2,616 feet into the Wasatch formation before reaching a total depth of 14,600 feet. No water flows were encountered at the Hartman 2-31A3 location while drilling through the Unita and Duchesne formations. The well was drilled to the surface casing point of 5014 feet with water. The surface casing was set and cemented at 5014 feet, 932 feet above the top of the Green River formation. The hydrocarbon bearing intervals in the Bluebell-Altamont Field include the Green River and Wasatch formations which are both Tertiary in age. These formations represent a period of sedimentation dominated by a lacustrine type environment.

Green River formation is comprised of lake type deposits including varved shales, marlstones, carbonates, and occasional sand. The "H", also referred to as the Douglas Creek member of the Green River, and "HI" intervals appear to be good time lines for correlation purposes. These two intervals consist of fractured carbonates and dark gray-black shales indicating a time when most of the basin was submerged by the The Green River has been subdivided into three lake waters. stages for completion purposes which may be altered at the operator's discretion: Stage V (5,946'-7,608'), the Upper Green River littoral facies with 700 feet of potential pay; Stage IV (7,608'-9,926'), the Upper Green River, separated from the littoral facies by the Trona I, with 922 feet of potential pay; and Stage III (9,926'-11,984'), the Lower Green River lacustrine facies with 615 feet of potential pay. Stages III, IV, and V are all normally pressured and a total of 2,237 feet or 37% of the Green River formation may be potentially productive. Green River formation was drilled with water to a depth of 11,000 feet before switching the system to mud. The Green River shows in the Hartman 2-31A3 are fair to moderate in comparison to other recently drilled Green River sequences. Dark brown oil #4 (7,202'-7,208')first observed with show Evacuation Creek member of the Green River formation and its presence continued until intermediate casing was set at a depth The lower Green River did not exhibit strong of 12,600 feet. fracture trends at this location as only approximately 50 barrels of mud were lost in the Green River formation, and samples did not indicate the presence of fractures.

Wasatch formation was deposited when an influx of sediments from the Wasatch mountain range encroached the basin. Generally, this was a transitional type deposit dominated by red followed by a return to a more euxinic lacustrine environment and then back to the transitional red bed sequence. The second transitional red wedge which is sometimes encountered in the basin was not penetrated by the Hartman 2-31A3, drilling ceased at a depth of 14,600 feet in the lacustrine facies of the The Wasatch formation penetrated in the Wasatch formation. Hartman 2-31A3 from a depth of 11,984 feet to a depth of 12,818 feet was normally pressured. This interval consisted mainly of red shales and some green and gray shales interbedded with The oil shows encountered within this normally sandstone. pressured Wasatch red bed sequence consisted of a green-brown paraffin. Lost circulation became a significant problem within redbed sequence which led to the decision to set intermediate casing at a depth of 12,600 feet. Approximately 2500 barrels of mud were lost while drilling from 12,000 feet to 12,600 feet and the mud losses mounted to over 8000 barrels before the 7" intermediate casing was cemented at 12,600 feet. The first occurrence of abnormal pressure was encountered with show #18 (12,823'-12,833') where it was necessary to increase the mud weight from 11.4 lbs./gal. to 12.1 lbs./gal. The oil shows encountered within the overpressured interval were a yellow-green paraffin. Below the Wasatch CP 215 at 13,997 feet, the character of the oil shows changed to a gray-green paraffin which continued to the total depth of the well. reached total depth of 14,600 feet with a maximum mud weight of 13.7 lbs./gal. and an additional 1137 barrels of mud were lost after intermediate casing was set and cemented at 12,600 feet. For completion purposes, the Wasatch formation has been divided into two stages, relative to the different pressure regimes encountered within the Wasatch interval; Stage II (11,986'-12,818'), the normally pressured Upper Wasatch, has 134 feet of pay; and Stage I (12,818'-14,600'), the abnormally potential pressured Lower Wasatch lacustrine facies has 343 potential pay. The Wasatch formation has a total of 477 feet of potential pay or 18% of total Wasatch section penetrated by the Hartman 2-31A3. Potential production from the Wasatch formation at this location is expected to be fair to good, when compared to other recently drilled Wasatch sequences in the area. total cumulative mud lost while drilling the Hartman 2-31A3 is estimated at 9,068 barrels. These extreme mud losses should be taken into consideration when this well is completed. the productive zones may be plugged off with lost circulation materials.

Summaries of the potential productive intervals recommended for perforation for Stage I, II, III, IV, and V follow the list of electric log tops. Log panels without these potential productive intervals plotted were prepared by the geologist for the Hartman 2-31A3 and mailed to Pennzoil's Houston office.

Please refer to the mud log provided by Rocky Mountain Geo-Engineering for a detailed description of the samples which were examined and verified daily by the mudloggers and the geologist.

ELECTRIC LOG TOPS - HARTMAN 2-31A3

<u>Formation</u>	Depth	<u>Subsea</u>	Structural Comparison to Hartman 1-31A3
Green River	5946	+ 378	102' high
Green River/Z	7130	- 806	121' high
Evacuation Creek	7200	- 876	123' high
Trona I	7608	-1284	110' high
Parachute Creek	8434	-2110	116' high
Green River/ Mahogany Bench	8538	-2214	100' high
Green River/DJ	9066	-2742	107' high
Douglas Creek/H	9926	-3602	112' high
Green River/HI	10,090	-3766	123' high
Green River/CP 70	11,078	-4754	88' high
Wasatch/ Top of 1st Red Wedge	11,984	-5660	
Intermediate Casing	12,600	-6276	
Wasatch/TAP HI	12,818	-6494	
Wasatch/ Base of 1st Red Wedge	13,000	-6676	
Wasatch/200	13,622	-7298	106' high
Wasatch/215	13,997	-7673	101' high
Wasatch/216	14,145	-7821	103' high
Wasatch/TFL	14,458	-8134	NDE
Total Depth	14,595	-8271	

HARTMAN 2-31A3 STAGE I - Lower Wasatch, overpressured

		GR	RT		0il						Net		
R-Log Depth	Mudlog	(60	>30	Total Gas	in	Mud	Wt.	Sample	Fract	Show	Pt.	Quality	Remarks
GR on DIL	Depth		ohms		Mud		/out	Show		Report	Pay		
	********	****	****	*******	*****	*****	*****	******	******	*******	***	******	*****
12,818	12,818			"TAP Hi",				red into	erval				
12,818-32	12,818-32	•	•	•	•	12.1/		y es		# 18			SI-circ. on choke
13,000	13,000		of 1	st Red Wed				Lacusti	rine Pac				
13,000-30	13,000-30	no	no	400-4810		12.2/		y es	fs	# 19	30	v.good	green-brown oil
13,072-96	13,072-96	some	no	450-3000		12.3/		yes		#20			lost 205 bbls.
13,176-80	13,176-80	yes	yes	2000-2200		12.4/	12.0	no			4	fair	4' flare
13,222-28	13,222-28		yes	3500-3000		12.6/		no				poor	2' flare
13,234-42	13,234-42	y es	some	1000-450		12.6/		y es			8	poor	2' flare
13,260-66	13,260-66	y es	no	300-5847	yes	12.6/	12.0	yes		#21	6	v.good	yellow-green oil
13,356-66	13,356-66	some		700-3200		13.3/		n o		#22		good	•
13,438-46	13,438-46	80 2 e	no	400-5120		13.3/	13.0	yes		#23	8	good	
13,462-68	13,462-68		ВO	2880-6400		13.3/		y es		\$24		good	4' flare
13,540-60	13,540-60			1600-3520	yes	13.4/	13.2	no		#25		good	
13,604-609	13,604-609				no	13.4/	13.3	no			5	poor	
13,622	13,622		tch /	CP 200									
13,626-54	13,626-54	80 m e	80me	300-3000		13.4/	13.1	no		#26	28	v.good	
13,688-94	13,688-94	y es	yes	1200-1500	tr	13.4/1	13.2	no				poor	
13,738-47	13,738-47	yes	yes	1800-1500	tr	13.4/1	13.1	no			9	poor	
13,764-76	13,764-76	yes	no	1000-920	tr	13.5/1	13.3	no			12	poor	
13,846-56	13,846-56	yes	yes	400-550	tr	13.5/1	13.3	no			10	poor	
13,880-86	13,880-86		yes	400-380	tr	13.5/1	13.4	no			6	poor	
13,896-914	13,896-914	yes	some	300-760	tr	13.5/1	13.4	no		#27	18	good	
13,936-42	13,936-42	y es	yes	250-250	tr	13.5/1	13.5	no			6	poor	
13,997	13,997	Wasat	tch /	CP 215									
14,000-06	14,000-06	yes	yes	200-200	tr	13.5/1	13.4	no			6	poor	
14,020-36	14,020-36	some	yes	200-5120	y es	13.5/1	3.1	some		#28	16	v.good	gray-green oil
14,058-68	14,058-68	yes	some	900-1200	tr	13.5/1	3.3	no			10	poor	
14,145	14,145	Wasat	cch /	CP 216									
14,174-78	14,174-78	y es	yes	500-500	tr	13.5/1	3.3	no			4	poor	
14,224-30	14,224-30	yes	yes	230-230	tr	13.5/1	3.3	no			6	poor	
14,247-54	14,247-54	yes	yes	300-320	tr	13.5/1	3.4	no			7	poor	
14,331-36	14,331-36	yes	yes	180-200	tr	13.5/1	3.5	no			5	poor	
14,358-64	14,358-64	some	no	NR	tr	13.5/1	3.4	no			6	poor	Trip- no bottoms up
14,371-86	14,371-86	y es	8086	320-820	y es	13.5/1	3.3	some		#29		good	•
14,396-401	14,396-401	yes	no	400-980	yes	13.5/1	3.4	yes		#30	5	good	
14,448-55	14,448-55	yes	yes	400-400	tr	13.6/1	3.5	no			7	poor	
14,458	14,458	Wasat	ch /	Three Fin	gered 1	ime							
14,458-78	14,458-78	y es	yes	400-1360	tr	13.6/1	3.4	some		#31-#32	20	good	•
*********	********	*****	11111	*******	*****	11111	111111	*****	1111111	******	1111	******	11111111111

STAGE I SUBTOTAL 343

SUMMARY OF POTENTIAL PRODUCTIVE INTERVALS RECOMMENDED FOR PERFORATION

HARTMAN 2-31A3 STAGE II - Wasatch, 1st Red Wedge, normal pressured

	••	GR	RT		0il		٠		-1	Net		
B-Log Depti		(60	>30	Total Gas		Mud Wt.		Fract			Quality	Remarks
GR on DLL	Depth	API	ohus		Mud	in/out	Show		Report	Pay		
						[******	******	******		******	******
11,986	11,986			Top of is		_		£1	410	σ.		L21
12,028-35	12,028-35	yes	yes	3800-7040	•	10.2/9.4	-	fl	# 13		good	brown oil
12,037-40	12,037-40	yes	yes	4800-4800	•	10.2/9.4	no				fair	5' flare
12,042-48	12,042-48	yes	y es	4800-4800		10.3/9.5	no	£1			fair	1-3' flare
12,068-75	12,068-75	yes	yes	3200-3200		10.4/9.6	no	fl			poor	1-2' flare
12,092-102	12,092-102	•	yes	3000-3000			. n o			-	poor	lost 197 bbls.
12,113-18	12,113-18	yes	yes	3000-3000		10.4/10.0	no	# 1			poor	mn 0 10) £1
12,132-36	12,132-36	yes	yes	2200-2200 2000-2000	•	10.4/10.0	no	fl fl		-	poor	TG 8-10' flare
12,138-45 12,147-52	12,138-45 12,147-52	yes	yes	1900-2000	•	10.5/10.3	no	fl			poor	
12,172-77	12,172-77	yes	yes	700-1600	•	,	no	11			poor fair	lost 40 bbls.
12,202-208	12,172-77	yes	yes	1000-875	yes	10.6/10.3	no					1081 40 0018.
12,202-200	12,202-200	•	yes	1000-875	tr	10.6/10.4	no				poor fair	
12,232-34	12,232-34	yes	yes	920-920		10.6/10.4	no	fl				•
•	•	yes	yes		tr	,	no	fl		-	poor	
12,242-45	12,242-45	yes	yes	980-980	tr	10.6/10.3	no	fl		-	poor	
12,282-86 12,312-15	12,282-86 12,312-15	yes	yes	800-750	tr	10.7/10.5	no	fl		•	poor	
•	•	yes	yes	650-700	tr	•	no	fl		-	poor	lost circ325 bbls.
12,318-20 12,469-72	12,318-20 12,469-72	yes	yes	700-700	tr	10.7/10.5	no	11		_	1000	Tost elre343 bbis.
•	•	yes	yes	150-150	tr	11.0/10.9	no			-	1000	tain as hetters un
12,499-502	12,499-502	•	yes	NR	y es	11.0/11.1	no			-	1000	trip - no bottoms up
12,512-16	12,512-16	yes	yes	150-150	yes	11.0/11.1	no		114	•	700r	lost 200 bbls.
12,526-32	12,526-32	yes	yes	180-7360	yes	11.4/10.8	yes		‡14		-	SI - circ. on choke
12,577-84 12,602	12,577-84	yes Tump	yes Dubbit	480-2480	yes	11.7/11.2	yes		# 15	1 8	good	3' flare
•	12,600	TNIR	וועמחה	ATE CASING								
GR on DIL 12,590-606	12,590-606	700	MT	2640-2800	TA C	11 7/11 9	70.0		≛ 1.€	16 4	tood	lost 145 bbls.
12,590-606	•	•	NL		yes	11.7/11.3	yes	f.	#16	16 g		TOSC 140 DDIS.
•	12,630-42	•	no	10-160	y es	11.2/11.1	yes	fs	#17		.good	******
*********	*********	* * * *	****		* * * * * *	*********	******	*****		* * * * * *	* * * * * * * *	********

STAGE II SUBTOTAL

134

HARTMAN 2-31A3
STAGE III - Green River Lacustrine, normal pressured (includes "H" & "HI")

		GR	RT		Oil					Net		
R-Log Depth	Mudlog	(60	>30	Total Gas	in	Mud Wt.	Sample	Pract	Show		Quality	Remarks
GR on DLL	Depth	API	ohns	units	Mud	in/out	Show		Report	Pay	•	
*********	******	****	:::::	*********	******	********	******	******	*******	****	*******	1111111111
9926	9926	Gree	n Riv	er - Dougla:	s Creek	#H#						
9926-32	9926-32	no	yes	210-290	y es	Drlg.	no	fl		6	poor	
9940-54	9940-54	yes	yes	300-350	yes	w/water	no	fl		14	fair	
9958-89	9958-89	yes	yes	390-900	yes		y es	fl	#8	31	good	sl. increase of oil
9997-10,001	9997-10,00	lyes	yes	400-380	yes		y es	fl		4	poor	
10,026-31	10,026-31	yes	yes	290-290	y es		no	fl		5	poor	
10,048-52	10,048-52	yes	yes	290-290	y es		no			4	poor	
10,090	10,090	Green	n Rive	er - "HI"								
10,092-117	10,092-117	yes	yes	320-450	y es	Drlg.	no	fl		25	fair	
10,122-37	10,122-37	y es	y es	400-320	y es	w/water	no			15	poor	
10,148-56	10,148-56	yes	yes	NR	yes		no			8	poor	trip - no bottoms up
10,177-86	10,177-86	yes	yes	NR	yes		no	fl		9	poor	trip - no bottoms up
10,237-52	10,237-52	y es	yes	400-410	y es		no			15	fair	fair amount of oil
10,264-67	10,264-67	no	yes	380-400	y es		no	fl		3	fair	sl. increase of oil
10,272-82	10,272-82	yes	yes	360-380	yes		no	fl		10	fair	
10,310-15	10,310-15	yes	yes	310-310	yes		no			5	poor	high invasion
10,320-27	10,320-27	no	yes	300-330	y es		no	fl		7	poor	
10,337-40	10,337-40	yes	yes	350-400	yes		no	fl		3	poor	
10,384-428	10,384-428	some	yes	350-500	y es		no	fl		44	fair	sl. invasion
10,476-92	10,476-92	yes	yes	520-560	y es		no			16	fair	
10,495-505	10,495-505	some	yes	550-600	y es		no			10	fair	
10,518-26	10,518-26	some	y es	600-610	yes		no			8	fair	
10,530-52	10,530-52	yes	yes.	600-700	yes		no	fl		22	good	
10,556-64	10,556-64	yes	yes	700-750	y es		no			8	fair	
10,656-70	10,656-70	no	yes	600-2200	yes		yes	fl	# 9	14	good	mod. amount of oil
10,690-94	10,690-94	yes	yes	2200-2200	yes		y es	fl		4	good	
10,702-28	10,702-28	y es	yes	1700-2800	y es		y es	fl,ft		26	good	
10,731-34	10,731-34	yes	yes	2300-2300	yes		y es	fl,ft		3	good	
10,774-84	10,774-84	some	yes	NR	y es		no	fl		10	fair	trip - no bottoms up
10,806-11	10,806-11	no	yes	980-1000	y es		no			5	fair	
10,838-42	10,838-42	yes	y es	990-1200	yes		no			. 4	fair	
11,014-21	11,014-21	yes	yes	1200-3200	yes	8.7/8.7	yes	fl	\$ 10	7	good	mod. increase of oil
11,026-32	11,026-32	yes	yes	2200-2400	yes	8.7/8.7	yes	fl	•	6	good	5' flare
11,044-47	11,044-47	y es	yes	2000-2200	yes	8.7/8.7	no	fl		3	fair	4' flare
11,050-52	11,050-52	no	yes	2100-2100	y es	8.7/8.7	no	fl		2	fair	4' flare
11,054-56	11,054-56	no	y es	2200-2200	y es	8.7/8.7	no	fl		2	fair	4' flare
11,078	11,078	Green	Rive	r - CP 70								
	11,092-140	yes	y es	2700-2300	yes	8.8/8.8	no			48	fair	1' flare
11,316-24	11,316-24	yes	yes	4800-4500	yes	9.2/8.9	no	fl		8	fair	4' flare
11,368-72	11,368-72	yes	yes	4000-5200	80 n e	9.4/9.2	no			4	fair	3-5' flare
11,377-80	11,377-80	yes	yes	5800-5800	tr	9.4/9.2	no			3	fair	3-5' flare
•		-	-	5800-6100		9.5/9.3	no			8	fair	3-5' flare
	11,393-402	-	•	6100-4300		9.5/9.3	no				poor	
11,408-11	11,408-11	•	y es	4000-4000	tr	9.6/9.3	no			3	poor	
11,414-17			•	3800-3800		9.6/9.3	no			3	poor	
11,423-28	11,423-28	y es	y es	4000-4200	tr	9.7/9.4	no			5	poor	

HARTMAN 2-31A3
STAGE III - Green River Lacustrine, normal pressured (includes "H" & "HI")

		a n	D.M		0il	•				Net		
Tira Namil	N., 21 a.v	GR (60	RT >30	Total Con		Mud Wt.	Sample	Proof	Show		Onality	Remarks
R-Log Depth				Total Gas units	in Mud	in/out	Spon	riace	Report	Pay	quarrey	
GR on DLL	Depth	API	ohms						•	•	******	
				4000-4000	tr	9.7/9.4	ħO	••••	*******		poor	
11,440-43	11,440-43	yes	y es	3000-3000		9.9/9.6	no	fl			poor	lost 28 bbls.
11,479-82	11,479-82	yes	yes	2400-2400	tr	10.0/9.6		fl			poor	TOBC TO DOING
11,505-11	11,505-11	yes	yes		tr	10.0/9.6	no	11			poor	
11,516-22	11,516-22	yes	80116	2200-1600	tr	10.0/9.6	no				fair	lost 27 bbls.
11,526-38	11,526-38	yes	yes	1600-3100	tr	10.0/9.6	no	fl	‡ 11		good	5' flare
11,548-55	11,548-55	yes	y es	2560-5760	yes		no	11	#11		fair	3' flare
11,562-70	11,562-70	y es	yes	3200-3500	yes	10.0/9.7	no				poor	3' flare
11,576-78	11,576-78	yes	y es	3100-3200	tr	10.0/9.7	no				•	2' flare
11,590-94	11,590-94	y es	yes	3200-3000	tr	10.0/9.6	no				poor fair	1-2' flare
11,606-608	11,606-608	-	y es	3000-3800	tr	10.0/9.6	no 				fair	1' flare
11,728-46	11,728-46	y es	some	2400-3400	yes	10.0/9.6	no					1' flare
11,756-59	11,756-59	y es	y es	2600-2600	yes	10.0/9.7	no				poor	
11,767-70	11,767-70	y es	y es	2700-2700	tr	10.0/9.7	no				poor	i' flare
11,780-92	11,780-92	y es	yes	2800-2100	tr	10.0/9.7	no				poor	i' flare
11,798-808	11,798-808	yes	yes	2000-2000	tr	10.0/9.6	no				poor	1' flare
11,815-18	11,815-18	yes	yes	2000-2000	tr	10.0/9.6	no				poor	1' flare
11,824-35	11,824-35	y es	yes.	2000-2000	tr	10.0/9.6	n o	fl			poor	1' flare
11,859-72	11,859-72	yes	y es	3200-3400	tr	10.0/9.6	no				poor	2' flare
11,883-88	11,883-88	yes	yes	3400-3400	tr	10.0/9.6	no				poor	1-2' flare
11,894-96	11,894-96	yes	yes	3700-3700	tr	10.0/9.6	no	fl	•	2	poor	1-2' flare
11,899-906	11,899-906	yes	y es	3700-3800	tr	10.0/9.6	no			7	poor	1-2' flare
11,916-27	11,916-27	y es	some	3500-3800	tr	10.0/9.5	no	fl			poor	1-2' flare
11,932-36	11,932-36	y es	yes	3800-3800	tr	10.0/9.5	no	fl			poor	1-2' flare
11,962-69	11,962-69	yes	yes	2000-3200	tr	10.0/9.6	no	fl	#12		good	1-2' flare
11,974-78	11,974-78	yes	y es	2400-2800	tr	10.0/9.6	no	fl			fair	1-2' flare
********	*********	****	****	*******	*****	*********	******	******	*******	****	*******	1111111111111
							OF LOD	TIT GIID	ተለጥል፣	615		

STAGE III SUBTOTAL

615

HARTMAN 2-31A3
STAGE IV - Green River, normal pressured (below Trona I)

GR BT Oil Net B-Log Depth Mudlog (60)30 Total Gas in Mud Wt. Sample Fract Show Ft. Quality Remarks GR on DLL Depth API ohms units Mud in/out Show Report Pay	
GR on DLL Depth API ohms units Mud in/out Show Report Pay	

7608 7608 Green River - Trona I	
8012-24 8012-24 some yes 100-100 tr Drlg. no 12 poor	
8028-40 8028-40 some yes 100-100 tr w/water no 12 poor	
8046-132 8046-132 some yes 100-300 tr yes 86 fair	
8137-50 8137-50 no yes NR tr yes 13 poor trip - no bo	ttoms up
8158-66 8158-66 no yes 130-130 yes yes 8 poor LAT	
8170-78 8170-78 no yes 130-170 yes yes 8 poor	
8280-384 8280-384 some yes 97-290 tr some fl 104 fair	
8434 8434 Green River - Parachute Creek	
8522-602 8522-602 some yes 85-280 yes yes 80 fair	
8538 8538 Green River - Mahogany Bench	
8652-76 8652-76 some yes 150-190 some Drlg. yes 24 poor	
8690-718 8690-718 no yes 120-150 tr w/water no 28 poor	
8752-64 8752-64 yes yes 100-90 no no 12 poor	
8774-80 8774-80 no yes 80-80 no no 6 poor	
8784-812 8784-812 some yes 80-320 no no 28 fair	
8825-47 8825-47 no yes 100-82 no no 22 v.poor	
8851-72 8851-72 some yes 85-150 no no 21 poor	
8876-98 8876-98 some yes 125-1152 yes yes #6 22 v.good fair amount	of tar
8902-12 8902-12 some yes 200-200 some yes 10 fair	
8946-54 8946-54 yes yes 180-180 no no fl 8 poor	
8973-9050 8973-9050 some yes 95-380 yes yes fl #7 77 good high invasio	n
9057-62 9057-62 no yes 350-350 yes yes fl 5 fair	
9066 9066 Green River - "DJ"	
9066-75 9066-75 yes yes 320-320 yes Drlg. yes fl 9 fair	
9092-96 9092-96 yes yes 300-300 yes w/water yes 4 fair	
9148-56 9148-56 yes yes 320-330 yes no 8 fair	
9173-94 9173-94 yes yes 340-340 yes no 21 fair	
9198-204 9198-204 yes yes 340-340 yes no 6 fair	
9228-32 9228-32 yes yes 380-400 yes no 4 fair	
9238-44 9238-44 yes yes 400-480 yes no 6 fair	
9264-84 9264-84 yes yes 420-500 yes no 20 fair	
9289-300 9289-300 yes yes 500-500 yes no 11 fair	
9342-52 9342-52 yes yes 400-380 yes no 10 fair	
9379-94 9379-94 yes yes 360-370 yes yes fl 15 fair	
9407-14 9407-14 yes yes 390-410 yes yes 7 fair	
9432-42 9432-42 yes yes 330-330 yes yes fl 10 fair high invasio	n
9444-48 9444-48 yes yes 340-360 yes yes 4 fair	
9452-58 9452-58 yes yes 360-380 yes yes 6 fair	
9480-510 9480-510 yes yes 350-400 yes yes fl 30 fair	
9522-32 9522-32 yes yes 320-350 yes no 10 fair	
9584-91 9584-91 yes yes 400-400 yes no ? fair	
9593-601 9593-601 yes yes 400-400 yes no 8 fair	
9605-12 9605-12 yes yes 400-500 yes no 7 fair	
9616-20 9616-20 yes yes 450-450 yes no 4 fair	
9622-28 9622-28 yes yes 450-450 yes no 6 fair	

SUMMARY OF POTENTIAL PRODUCTIVE INTERVALS RECOMMENDED FOR PERFORATION

HARTMAN 2-31A3
STAGE IV - Green River, normal pressured (below Trona I)

		GR	RT		0il					Net		
B-Log Depth	Mudlog	(60	>30	Total Gas	in	Mud Wt.	Sample	Fract	Show	Pt.	Quality	Remarks
GR on DLL	Depth	API	opus	units	Mud	in/out	Show		Report	Pay		
*********	*********	****	****	********	******	********	*****	*****	*******	****	******	********
9634-38	9634-38	yes	yes	450-450	yes		no			4	fair	
9641-44	9641-44	yes	yes	430-450	yes		no			3	fair	
9648-54	9648-54	yes	yes	450-450	y es		no	fl		6	fair	
9656-62	9656-62	yes	yes	450-450	yes		no	fl		6	fair	
9664-68	9664-68	yes	y es	450-430	yes		no			4	fair	
9670-90	9670-90	yes	yes	430-480	yes	1	no	fl		20	fair	
9698-704	9698-704	y es	y es	450-450	y es	,	no			6	fair	
9706-10	9706-10	yes	y es	450-460	yes		no			4	fair	
9716-27	9716-27	y es	y es	460-460	yes		no			11	fair	
9733-40	9733-40	yes	yes	480-500	yes		no			9	fair	
9746-58	9746-58	yes	y es	480-400	y es		no	fl		12	fair	
9783-88	9783-88	yes	yes	500-500	yes		yes			5	fair	
9798-804	9798-804	y es	yes	500-500	yes		no			6	fair	
9808-14	9808-14	yes	yes	500-540	yes		no			6	fair	•
9827-36	9827-36	some	yes	540-500	yes		no			9	fair	
9845-54	9845-54	yes	yes	460-460	yes		no			9	fair	
9874-79	9874-79	yes	yes	430-430	yes		no			5	fair	
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STAGE IV SUBTOTAL

922

HARTMAN 2-31A3
STAGE V - Green River Transition, littoral, normal pressured

		GR	RT		0il					Net		. ·
R-Log Depth	Mudlog	(60	>30	Total Gas	in	Mud Wt.	Sample	Fract	Show		Quality	Remarks
GR on DLL	Depth	API	ohms	units	Mud	in/out	Show	11000	Report	Pay	444110,	2020112
						*******		::::::				********
5946	5946					l pressured						
5948-64	5948-64	-		1-2.5	no	Drlg.	no	fl		16	poor	
5996-6002	5996-6002	y es		4.5-7	no	w/water	no				poor	
6006-26	6006-26	y es	•	6-7.5	no		no	fl			poor	
6050-76	6050-76	some	some	6.5-10	no		no	fl			poor	
6080-84	6080-84	y es	y es	6-10	no		no	fl			poor	
6087-90	6087-90	yes	yes	10-50	no		no	fl			poor	
6094-98	6094-98	no	yes	20-10	no		no	fl		4	v.poor	
6114-20	6114-20	some	yes	10-82	no		no	fl			fair	*
6124-34	6124-34	y es	yes	20-82	no		no	fl		10	fair	
6148-60	6148-60	some	yes	9-30	no		no	fl		12	poor	
6164-82	6164-82	some	yes	25-70	no		no	fl		18	poor	
6186-96	6186-96	some	yes	2-10	no		no	fl		10	poor	sl. invasion
6200-22	6200-22	80 1 e	yes	10-1120	ħO		no	fl	‡ 1	22	v.good	sl. invasion
6228-40	6228-40	some	yes	8-7	no		no	fl		12	v.poor	high invasion
6255-304	6255-304	some	yes	6-43	no		no	fl		49	fair	high invasion
6309-42	6309-42	some	yes	18-70	no		no	fl		33	fair	high invasion
6356-72	6356-72	80me	yes	12-2432	no		yes	fl	\$ 2	16	v.good	high invasion
6384-430	6384-430	some	yes	120-1920	no		y es	fl	#3	46	good	high invasion
6450-90	6450-90	some	yes	80-280	no		yes	fl		40	fair	high invasion
	6496-518	some	yes	65-200	no		no			22	fair	
6529-34	6529-34	yes	yes	100-100	no		пo			5	poor	
6540-46	6540-46	yes	y es	100-120	no		no			6	poor	
6552-84	6552-84	some	y es	100-100	no		no			32	poor	high invasion
	6602-16	yes	yes	100-100	no		no			14	poor	
	6622-43	yes	y es	100-100	n 0		no				poor	
	6675-86	80me	yes	100-350	no		no				fair	
	6703-14	80 3 e	y es	95-160	no		no				poor	
	6850-57	S0	yes	200-220	no		no				poor	
	6962-78	some		200-380	no		yes				fair	
	7056-64	y es	•	160-200	no	`	yes				poor	
	7070-78	80 2 e		150-150	no		y es			8	poor	high invasion
	7130			r - Z								
	7131-45			150-150	no	Drlg.	yes				•	high invasion
	7186-94		•	180-180	no	w/water	y es			8	poor	high invasion
	7200			r - Evacua								
	7200-22			176-464	•	Drlg.	•	fl	#4			tr. brown oil
	7292-308		•	250-704	•	w/water	•	fl	‡ 5			brown oil
	7352-62	-	•	220-220	yes		no				poor	
	7370-94	-	-	200-200	BORE		no.				poor	
	7400-10		•	175-175	no		no					high invasion
	7418-46			180-180	no		no				poor	
	7454-70		-	180-180	no		no				poor	
7494-532	7494-532 ********			180-280	10 11111	*****	no tittiti	*****			poor	******

DRILLING AND LOGGING SUMMARY - HARTMAN 2-31A3

The Hartman 2-31A3 was spud on October 10, 1989 and Grace Rig No.186 started drilling a 13-3/4" hole. Used bits and retipped bits were used to drill the 13-3/4" surface hole, which required a total of 19 bits to reach the surface casing depth of 5,014 feet. No water flows were encountered while drilling to the surface casing point of 5,014 feet. 10-3/4" surface casing was set and cemented at 5,014 feet and the drilling of a 8-3/4" hole with water resumed. It was not necessary to mud up until a depth of 11,000 feet was reached. Lost circulation became a serious problem in the Wasatch 1st Red Wedge below a depth of 12,000 feet. Approximately 2500 barrels of mud were lost while drilling from 12,000 feet to 12,600 feet. These mud losses led to a decision to set 7" intermediate casing at a depth of 12,600 By the time that the 7" intermediate was set and cemented the mud losses accumulated to over 8000 barrels. Various types of lost circulation materials were used in attempts to stop the mud loss, including Magmafiber, cotton seed hulls, mica, cedar fiber, and Liquid Casing with OM Seal. Magmafiber, being acid soluble, was used as much as possible, but this may have caused problems for the electric logging of the intermediate hole. Magmafiber seemed to get bound up with the paraffin in the mud creating bridges down hole which could not be penetrated by the logging tools. The intermediate casing was set and cemented at a depth of 12,600 feet, about 400 feet above the base of the 1st Red Wedge in the Wasatch formation and 218 feet above the top of the overpressured interval, "TAP Hi".

Schlumberger logged the open hole before intermediate casing was set. The Dual Laterolog-MSFL was attempted on the first run in the hole. Bridges were encountered while tripping in the hole with the resistivity tool, the first one at a depth of 10,300 feet. The logging tool was able to get down to a depth of 10,535 feet where the tool was unable to penetrate any The tool then became stuck at approximately 10,507 feet while attempting to penetrate the bridge. The stuck logging tool was worked nearly 24 hours without success. tool was recovered in good condition by stripping over the wireline and washing over the fish. The bottom of the tool was caked with paraffin and Magmafiber. After recovering the fish, the drilling mud was heated in an attempt to break up the paraffin blockages and circulate and condition the hole for a second attempt to run electric logs. The mud was heated to 180 degrees going into the hole using hot oiler trucks. Laterolog was run the second time without the MSFL to avoid any potential problems with tool-sticking and insure the recovery of resistivity log and the Gamma Ray . successfully completing the DLL, a Temperature Log was run with Then the Borehole Geometry Tool, which is a fourarm caliper, was run. The BGT tool set down while tripping in the hole at 12,416 feet and was unable to penetrate below a depth of 12,430 feet. The BGT was logged out from a depth of

12,430 feet with no major problems. A trip to circulate and condition the hole was made after the four-arm caliper log was completed successfully. The mud was heated again to break up any paraffin blockages. Complete returns were lost while breaking circulation with the heated mud. The engineers decided to try displacing the hot mud with cold mud and running a temperature log through the drillpipe to try and determine where all the mud was being lost. This temperature log was run through drillpipe from 5,970 feet to 10,170 feet. obvious was observed from the temperature log. The mud was heated again and the hole was circulated with hot mud before tripping out of the hole to finish running the open hole logs. The Digital Sonic and Sonic Waveforms were run trouble-free and then the Formation Microscanner (FMS) was run over selected intervals with no problems. After completing the electric logging, which took 9 days, the wellbore was conditioned to begin running the 7" intermediate casing. The entire process of logging, running the 7" casing, and cementing it took a total of 20 days to complete. The paraffin plugging and lost circulation were to blame for most of the delay in resumption of drilling the Hartman 2-31A3 from 12,600 feet to the total depth of 14,600 The 7" intermediate string of casing was finally set & cemented at a depth of 12,600 feet.

The remainder of the hole was drilled with 6" diamond bits. Abnormal pressure was encountered at a depth of 12,818 feet with The mud weight was increased show #18 in the Hartman 2-31A3. from 11.4 lbs./gal. to 12.1 lbs./gal. to stop the flow of green paraffinic oil. The lost circulation was still a problem after setting intermediate casing, but it was not as severe as it was through the upper portion of the hole, only 1137 barrels mud were lost while drilling the rest of the Wasatch The Hartman 2-31A3 was drilled to a total depth of interval. 14,600 feet with a maximum mud weight of 13.7 lbs./gal. total mud lost during the drilling of the Hartman 2-31A3 was After logging the well at T.D., 5" estimated at 9,068 barrels. production casing was set at 14,593 feet.

Schlumberger logged the open hole after the total depth of 14,600 feet was reached. The Digital Sonic and Sonic Waveforms were run first, followed by the Dual Induction - SFL. these log runs were completed successfully with high quality. A four-arm caliper was attempted, but the tool stopped just out of the intermediate casing at a depth of 12,620 feet and was unable to penetrate any further. The tool was pulled out of the hole and one arm was found missing. No further attempts were made to obtain electric logs. A trip was made with a concave mill and junk basket to retrieve the caliper arm left in the hole prior to circulating and conditioning the hole to run the 5" production liner. A 5 foot depth correction was made to the Driller's T.D. of 14,600 feet making the final T.D. 14,595 feet. The 5" production liner was set and cemented at the total depth of 14,593' with no major problems getting the liner in the ground.

DATE	DAY	DEPTH	FOOTAGE	OPERATIONS
*********	******	*****	******	*********
10-Oct-89				Spud 2:00 PM MST 10-10-89.
11-Oct-89	1	860	692	RU rotary tools; drlg. 13 3/4"
			-	hole w/bit #1.
12-Oct-89	2	1730	870	Drlg. #1; trip for bit #2;
,				drlg. #2; trip for bit #3;
*: *				drlg. #3.
13-Oct-89	3	2490	760	Drlg. #3; trip for bit #4;
				drlg. #4; trip for bit #5.
14-Oct-89	4	2962	472	TIH w/ bit #5; wash to bottom;
				drlg. #5; trip for bit #6.
15-Oct-89	5	3419	457	TIH w/ bit #6; drlg. #6; trip
				for bit #7; wash 50' to bottom,
				15' fill; drlg. #7; trip for bit
	_			#8; wash 50' to bottom, 15' fill.
16-Oct-89	6	3713	294	Drlg. #8; trip for bit #9; wash &
				ream 60' to bottom; drlg. #9;
				trip for bit #10; wash & ream 60'
				to bottom; drlg. #10; weld stand
17 0 1 00	~	4007	204	pipe.
17-Oct-89	7	4007	294	Drlg. #10; trip for bit #11; wash & ream to bottom; drlg. #11; trip
				for bit #12.
18-Oct-89	8	4160	153	TIH w/ bit #12; wash & ream to
16-000-05	O	4100	100	bottom; drlg. #12; trip for bit
				#13; POOH tite hole @ 1303'; work
	·			stuck pipe; POOH; TIH w/ bit #13;
				cut drill line; wash & ream to
				bottom; drlg. #13.
19-Oct-89	9	4382	222	Drlg. #13; trip for bit #14; wash
				& ream to bottom, bridge @ 4242';
				drlg. #14.
20-Oct-89	- 10	4487	105	Drlg. #14; trip for bit #15; wash
				& ream to bottom; drlg. #15; trip
				for bit #16.
21-Oct-89	11	4676	189	Wash & ream 120' to bottom; drlg.
				#16; trip for bit #17; drlg. #17.
22-Oct-89	12	4902		Drlg. #17; trip for bit #18.
23-Oct-89	13	4978	76	TIH w/ bit #18; trip for bit #19;
				wash & ream to bottom; drlg. #19.
24-Oct-89	14	5014	36	Drlg. #19; circ. & cond. for csg.;
				RU & run 10 3/4" surface csg.;
				wash to bottom from 4840'; cement;
05 0 4 00	4.5	5014	^	10 3/4" surface csg. @ 5014'.
25-Oct-89	15	5014	U	WOC; cut off csg.; install & test
06 0-+ 00	1.0	5014	^	wellhead; nipple up BOPs. NU & test BOPs; test hydril; PU
26-Oct-89	16	5U14	U	BHA.
27-Oct-89	17	5435	191	TIH w/ bit #20; test csg.; drill
<u> </u>	Ŧ (0400		cement; drill 8 3/4" hole to
				5030' & run leak off test; drlg.

DATE	DAY	DEPTH	FOOTAGE	OPERATIONS
*********	******	*****	*****	**********
				8 3/4" hole w/ bit #20.
28-Oct-89	18	5928	493	Drlg. #20; run leak off test @ 5545'; drlg. #20.
29-Oct-89	19	6564	636	Drlg. #20.
30-Oct-89	20	7170		Drlg. #20.
31-Oct-89	21	7796	626	Drlg. #20.
01-Nov-89	22	8153	357	Drlg. #20; trip for bit #21.
02-Nov-89	23	8625	472	Ream from 8013' to 8153'; drlg. #21.
03-Nov-89	24	9180	555	Drlg. #21.
04 - Nov - 89	25	9800		Drlg. #21.
05-Nov-89	26	10190	390	Drlg. #21; trip for bit #22; wash & ream to bottom; drlg. #22.
06-Nov-89	27	10785	595	Drlg. #22; begin to mud up @ 10,780'.
07-Nov-89	28	11040	255	Trip for bit #23; ream 10,632' to 10,785'; drlg. #23.
08-Nov-89	29	11348	308	Drlg. #23.
09-Nov-89	30	11472		Trip for hole in pipe; TIH w/ new
				bit #24; cut drill line; drlg. #24.
10-Nov-89	31	11647	175	Drlg. #24; lost 27 bbls. of mud @ 11,480'.
11-Nov-89	32	11807	160	Drlg. #24; lost 23 bbls. of mud; cum. loss 50 bbls.
12-Nov-89	33	11964	157	Drlg. #24.
13-Nov-89	34	12006		Drlg. #24; circ. @ 11,985'; TOOH & magnaflux DCs; LD 2 cracked DCs & PU 2 DCs; TIH w/ bit #25; drlg.
14-Nov-89	35	12137	131	#25. Drlg. #25; lost 197 bbls. of mud @ 12,070'; cum loss 247 bbls.
15-Nov-89	36	12137	0	Circ. samples @ 12,137'; TOOH w/
			_	bit #25, lost all 3 cones; WO
				magnet; TIH w/ magnet; fish @
				12,137'; TOOH w/ magnet, recover
				1 cone; TIH w/ magnet; lost 72
				bbls. of mud on trip; cum. loss
				319 bbls.
16-Nov-89	37	12170	33	TIH w/ magnet; circ. & fish for
				cones; TOOH w/ magnet; recovered
				all cones; TIH w/ bit #26; wash
				& ream to bottom; drlg. #26; lost
				40 bbls. of mud; cum. loss 349
17 11 00	0.0	10010		bbls.
17-Nov-89	38	12318	148	Drlg. #26; lost 336 bbls. of mud;
10 Na 00	20.0	10440	100	cum. loss 685 bbls.
18-Nov-89	39	12446		Drlg. #26; lost 491 bbls. of mud; cum. loss 1176 bbls.
19-Nov-89	40	12510		Drlg. #26; trip for bit #27; cut

DATE *******	DAY		FOOTAGE OPERATIONS ************************************
			drill line; TIH w/ bit #27; Grace went on day rate @ 4:55 PM 11-18-89; lost 265 bbls. of mud; cum. loss 1441 bbls.
20-Nov-89	41	12563	53 TIH w/ bit #27; ream 40' to bottom; drlg. #27; gas kick @ 12,528', flow line blew off; lost 313 bbls. of mud while killing well; repair flow line; drlg. #27; lost 658 bbls. of mud in 24 hrs.; cum. loss 2099 bbls.
21-Nov-89	42	12600	37 Drlg. #27; circ & cond. for logs; short trip; lost 414 bbls. of mud; cum. loss 2513 bbls.
22-Nov-89	43	12600	O Circ. & cond. for logs; TOOH for logs; RU Schlumberger; run DLL w/MSFL; logging tool stuck @ 10,500'; lost 63 bbls. of mud; cum. loss 2576 bbls.
23-Nov-89	44	12600	0 Work wireline, try to free stuck tool; TIH w/wireline fishing tool.
24-Nov-89	45	12600	O Fishing for stuck tool; TOOH w/ fish.
25-Nov-89	46	12600	O TOOH w/ fish; LD fishing tool; TIH w/ bit; circ. & cond. hole @ 10,513'; lost returns; regain circ.; TIH breaking circ.; circ. & cond. for logs; lost 1218 bbls. of mud; cum. loss 3794 bbls.
26-Nov-89	47	12600	O Circ. & remove LCM & paraffin from mud system; Use hot oilers to raise temp. of mud to 150 deg.; TOOH to log; RU Schlumberger; run DLL w/o MSFL.
27-Nov-89	48	12600	O Run temperature log & 4-arm caliper (BGT); TIH to circ. & cond. mud; heat mud w/ hot oilers to 180 deg.
28-Nov-89	49	12600	O Circ. hot mud @ 7500'; TIH w/ 27 stds.; lost returns; displace hot mud w/ cold mud; circ. w/100% returns; lost 727 bbls. of mud; cum. loss 4521 bbls.
29-Nov-89	50	12600	O Displace hot mud w/ cold mud; RU Schlumberger; run temperature log; TIH to circ. & cond., hit bridge @ 12,429'; heat mud w/ hot oilers to 127 deg. @ flowline; TOOH to finish logging; lost 21 bbls. of mud; cum. loss 4542 bbls.

DATE	DAY	DEPTH	FOOTAGE OPERATIONS ************************************
30-Nov-89	51	12600	0 RU Schlumberger; run sonic log & FMS (Formation Microscanner); test BOPs; TIH to circ. & cond. for 7" intermediate csg.
01-Dec-89	52	12600	O TIH; cut drill line; TIH to 7513'; circ. & shake out LCM; lost total returns; TIH to 9738'; circ. w/ no returns; mix 100 bbl. Liquid Casing & OM Seal pill; displace pill from 9738' to 7700' & let it seal; lost 216 bbls. of mud; cum. loss 4758 bbls.
02-Dec-89	53	12600	O Squeezing Liquid Casing & OM Seal pill into formation; lost 96 bbls. of mud; cum. loss 4854 bbls.
03-Dec-89	54	12600	O Squeezing Liquid Casing & OM Seal pills into formation; circ. & cond. to run 7" casing; lost 1225 bbls. of mud; cum. loss 6079 bbls.
04-Dec-89	55	12600	O Circ. & cond. mud & shake out LCM; add Liquid Casing to mud system; RU & begin to LD drill string to run 7" intermediate casing; lost 80 bbls. of mud; cum. loss 6159 bbls.
05-Dec-89	56	12600	O Lay down DP; cut drill line & LD DCs; pull wear bushing & RU csg. crews; run 7" csg. @ 5 min./jt.; lost 44 bbls. of mud; cum. loss 6203 bbls.
06-Dec-89	57	12600	O Running 7" csg. w/ full returns; lost 322 bbls. of mud; cum. loss 6525 bbls.
07-Dec-89	58	12600	0 Run 7" csg. to 12,600'; no circ. but pipe is free; lost 1406 bbls. of mud; cum. loss 7931 bbls.
08-Dec-89	59	12600	O Circ. & work csg.; cement 1st stage; RU PLS & run tracer survey; found top of loss @ 6035'; pump 2nd stage cement; ND BOPs; lost 1055 bbls. of mud; cum. loss 9080 bbls.
09-Dec-89	60	12600	0 7" intermediate csg. set & cement @ 12,600'; ND, cut 7" csg., & NU; pressure test BOPs; PU 3 1/2" kelly & LD 4 1/2" kelly; RU for 3 1/2" DP; PU BHA; cut drill line.
10-Dec-89	61	12600	O PU 3 1/2" DP; drill out cement; test 7" csg.
11-Dec-89	62	12600	0 Test 7" csg.; drlg. cement w/ 6"

12-Dec-89	DATE	DAY		FOOTAGE	
12-Dec-89	*****	******	******	*****	
13-Dec-89	10 D 00	c o	10001	0.1	
13-Dec-89	12-Dec-89	63	12621	. 21	
begin trip for bit #29; SLM. 14-Dec-89	1200	6.1	19714	0.2	
14-Dec-89	13-Dec-63	04	12/14	93	
# ream 58' to bottom; drlg. #29. 15-Dec-89	14-Dec-89	65	12750	36	
15-Dec-89	14 Dec 00	00	12.00	50	
## Magnaflux DCs; TIH w/ 6" diamond bit #30. ## 12865 84 TIH w/ bit #30; wash & ream 60' to bottom; drlg. #30; clean rocks out of pump; drlg. #30; shut in & circ. on choke @ 12,827'; raise mud wt. from 11.4 to 12.0#/gal.; drlg. #30; lost circ. @ 12,942'; pump LCM pill & regain returns; circ. gas out thru choke; drlg. #30; lost 381 bbls. of mud; cum. loss 8312 bbls. ## 13050 106 Drlg. #30; lost 40 bbls. of mud; cum. loss 8352 bbls. ## 19-Dec-89	15-Dec-89	66	12781	31	
16-Dec-89			12.01	01	
16-Dec-89 67 12865 84 TIH w/ bit #30; wash & ream 60' to bottom; drlg. #30; clean rocks out of pump; drlg. #30; shut in & circ. on choke @ 12,827'; raise mud wt. from 11.4 to 12.0#/gal.; drlg. #30. 17-Dec-89 68 12944 79 Drlg. #30; lost circ. @ 12,942'; pump LCM pill & regain returns; circ. gas out thru choke; drlg. #30; lost 381 bbls. of mud; cum. loss 8312 bbls. 18-Dec-89 69 13050 166 Drlg. #30; lost 40 bbls. of mud; cum. loss 8352 bbls. 19-Dec-89 70 13168 118 Drlg. #30; lost 227 bbls. of mud; cum. loss 8579 bbls. 20-Dec-89 71 13278 110 Drlg. #30; lost 78 bbls. of mud; cum. loss 8657 bbls. 22-Dec-89 72 13355 77 Drlg. #30; lost 78 bbls. of mud; cum. loss 8667 bbls. 22-Dec-89 74 13544 89 Drlg. #30; lost 10 bbls. of mud; cum. loss 8667 bbls. 23-Dec-89 74 13544 100 Drlg. #30; lost 143 bbls. of mud; cum. loss 8810 bbls. 24-Dec-89 75 13645 101 Drlg. #30; lost 143 bbls. of mud; cum. loss 8840 bbls. 25-Dec-89 76 13735 90 Drlg. #30; lost 50 bbls. of mud; cum. loss 8840 bbls. 25-Dec-89 77 13812 77 Drlg. #30; lost 50 bbls. of mud; cum. loss 8890 bbls. 27-Dec-89 78 13890 78 TIH w/ 6" diamond bit #31; wash & ream to bottom; drlg. #31; lost 70 bbls. of mud; cum. loss 890 bbls. 28-Dec-89 80 14151 137 Drlg. #31; lost 10 bbls. of mud; cum. loss 8970 bbls. 29-Dec-89 80 14151 137 Drlg. #31; lost 67 bbls. of mud; cum. loss 9037 bbls. 30-Dec-89 81 14285 134 Drlg. #31; lost 6 bbls. of mud; cum. loss 9043 bbls.					
to bottom; drlg. #30; clean rocks out of pump; drlg. #30; weld stand pipe; drlg. #30; shut in & circ. on choke @ 12,827; raise mud wt. from 11.4 to 12.0#/gal.; drlg. #30. 17-Dec-89 68 12944 79 Drlg. #30; lost circ. @ 12,942'; pump LCM pill & regain returns; circ. gas out thru choke; drlg. #30; lost 381 bbls. of mud; cum. loss 8312 bbls. 18-Dec-89 69 13050 106 Drlg. #30; lost 40 bbls. of mud; cum. loss 8352 bbls. 19-Dec-89 70 13168 118 Drlg. #30; lost 227 bbls. of mud; cum. loss 8579 bbls. 20-Dec-89 71 13278 110 Drlg. #30; lost 227 bbls. of mud; cum. loss 8579 bbls. 21-Dec-89 72 13355 77 Drlg. #30; lost 78 bbls. of mud; cum. loss 8657 bbls. 22-Dec-89 73 13444 89 Drlg. #30; lost 78 bbls. of mud; cum. loss 8667 bbls. 23-Dec-89 74 13544 100 Drlg. #30; lost 10 bbls. of mud; cum. loss 8667 bbls. 24-Dec-89 75 13645 101 Drlg. #30; lost 30 bbls. of mud; cum. loss 8840 bbls. 25-Dec-89 76 13735 90 Drlg. #30; lost 50 bbls. of mud; cum. loss 8890 bbls. 26-Dec-89 77 13812 77 Drlg. #30; trip for bit #31; magnaflux DCs. 27-Dec-89 78 13890 78 TIH w/ 6" diamond bit #31; wash & ream to bottom; drlg. #31; lost 70 bbls. of mud; cum. loss 890 bbls. 28-Dec-89 79 14014 124 Drlg. #31; lost 10 bbls. of mud; cum. loss 8970 bbls. 29-Dec-89 80 14151 137 Drlg. #31; lost 67 bbls. of mud; cum. loss 9037 bbls. 30-Dec-89 81 14285 134 Drlg. #31; lost 6 bbls. of mud; cum. loss 9037 bbls.	16-Dec-89	67	12865	84	
out of pump; drlg. #30; weld stand pipe; drlg. #30; shut in & circ. on choke @ 12,827'; raise mud wt. from 11.4 to 12.0#/gal.; drlg. #30. 17-Dec-89 68 12944 79 Drlg. #30; lost circ. @ 12,942'; pump LCM pill & regain returns; circ. gas out thru choke; drlg. #30; lost 381 bbls. of mud; cum. loss 8312 bbls. 18-Dec-89 69 13050 106 Drlg. #30; lost 40 bbls. of mud; cum. loss 8352 bbls. 19-Dec-89 70 13168 118 Drlg. #30; lost 227 bbls. of mud; cum. loss 8579 bbls. 20-Dec-89 71 13278 110 Drlg. #30. 21-Dec-89 72 13355 77 Drlg. #30; lost 78 bbls. of mud; cum. loss 8676 bbls. 22-Dec-89 73 13444 89 Drlg. #30; lost 78 bbls. of mud; cum. loss 8667 bbls. 23-Dec-89 74 13544 100 Drlg. #30; lost 10 bbls. of mud; cum. loss 8867 bbls. 24-Dec-89 75 13645 101 Drlg. #30; lost 143 bbls. of mud; cum. loss 8810 bbls. 25-Dec-89 76 13735 90 Drlg. #30; lost 50 bbls. of mud; cum. loss 8840 bbls. 25-Dec-89 77 13812 77 Drlg. #30; trip for bit #31; magnaflux DCs. 27-Dec-89 78 13890 78 TIH w/ 6" diamond bit #31; wash & ream to bottom; drlg. #31; lost 70 bbls. of mud; cum. loss 8906 bbls. 28-Dec-89 80 14151 137 Drlg. #31; lost 10 bbls. of mud; cum. loss 8906 bbls. 29-Dec-89 80 14151 137 Drlg. #31; lost 67 bbls. of mud; cum. loss 8970 bbls. 29-Dec-89 81 14285 134 Drlg. #31; lost 6 bbls. of mud; cum. loss 9037 bbls.					
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20-Dec-89	10 Dec 00	10	10100	110	
21-Dec-89	20-Dec-89	71	13278	110	
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Cum. loss 8810 bbls.					cum. loss 8667 bbls.
24-Dec-89 75 13645 101 Drlg. #30; lost 30 bbls. of mud; cum. loss 8840 bbls. 25-Dec-89 76 13735 90 Drlg. #30; lost 50 bbls. of mud; cum. loss 8890 bbls. 26-Dec-89 77 13812 77 Drlg. #30; trip for bit #31; magnaflux DCs. 27-Dec-89 78 13890 78 TIH w/ 6" diamond bit #31; wash & ream to bottom; drlg. #31; lost 70 bbls. of mud on trip; cum. loss 8960 bbls. 28-Dec-89 79 14014 124 Drlg. #31; lost 10 bbls. of mud; cum. loss 8970 bbls. 29-Dec-89 80 14151 137 Drlg. #31; lost 67 bbls. of mud; cum. loss 9037 bbls. 30-Dec-89 81 14285 134 Drlg. #31; lost 6 bbls. of mud; cum. loss 9043 bbls.	23-Dec-89	74	13544	100	· · · · · · · · · · · · · · · · · · ·
cum. loss 8840 bbls. 25-Dec-89 76 13735 90 Drlg. #30; lost 50 bbls. of mud; cum. loss 8890 bbls. 26-Dec-89 77 13812 77 Drlg. #30; trip for bit #31; magnaflux DCs. 27-Dec-89 78 13890 78 TIH w/ 6" diamond bit #31; wash & ream to bottom; drlg. #31; lost 70 bbls. of mud on trip; cum. loss 8960 bbls. 28-Dec-89 79 14014 124 Drlg. #31; lost 10 bbls. of mud; cum. loss 8970 bbls. 29-Dec-89 80 14151 137 Drlg. #31; lost 67 bbls. of mud; cum. loss 9037 bbls. 30-Dec-89 81 14285 134 Drlg. #31; lost 6 bbls. of mud; cum. loss 9043 bbls.					
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& ream to bottom; drlg. #31; lost 70 bbls. of mud on trip; cum. loss 8960 bbls. 28-Dec-89 79 14014 124 Drlg. #31; lost 10 bbls. of mud; cum. loss 8970 bbls. 29-Dec-89 80 14151 137 Drlg. #31; lost 67 bbls. of mud; cum. loss 9037 bbls. 30-Dec-89 81 14285 134 Drlg. #31; lost 6 bbls. of mud; cum. loss 9043 bbls.	27-Dec-89	79	12800	7.0	
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29-Dec-89 80 14151 137 Drlg. #31; lost 67 bbls. of mud; cum. loss 9037 bbls. 30-Dec-89 81 14285 134 Drlg. #31; lost 6 bbls. of mud; cum. loss 9043 bbls.	1				·
cum. loss 9037 bbls. 30-Dec-89 81 14285 134 Drlg. #31; lost 6 bbls. of mud; cum. loss 9043 bbls.	29-Dec-89	80	14151	137	
cum. loss 9043 bbls.					
	30-Dec-89	81	14285	134	· · · · · · · · · · · · · · · · · · ·
31-Dec-89 82 14390 105 Drlg. #31; POOH 12 stds. for hole					
	31-Dec-89	82	14390	105	Drig. #31; POOH 12 stds. for hole

DAILY LOG OF OPERATIONS FOR HARTMAN 2-31A3 (6:00 AM depths)

DATE	DAY	DEPTH	FOOTAGE	
******	******	*****	****	********
				in pipe; W & R 50' to bottom; drlg. #31.
01-Jan-90	83	14526	136	Drlg. #31; lost 25 bbls. of mud; cum. loss 9068 bbls.
02-Jan-90	84	14600	74	Drlg. #31; circ. & cond. for logs; short trip 23 stds.; TIH w/ 7' fill; circ. & cond. for logs.
03-Jan-90	85	14600	0	Circ. & cond.; POOH for logs; RU Schlumberger; run Sonic log & DIL; attempt to run 4-arm caliper log; lost 1 arm in hole; WO mill.
04-Jan-90	86	14600	0	PU 5.9" concave mill & junk basket; TIH; wash from 12,602-650'; W&R 14,410-455'; wash 60' to bottom; POOH w/mill; recovered several small pieces; TIH w/ 6" bit.
05-Jan-90	87	14595	-5	5' depth correction; circ. & cond. to run 5" liner; POOH; RU casing crews; TIH w/ 5" liner.
06-Jan-90	88	14595	0	TIH w/ 5" liner; set & cement @ 14,593'; top of liner @ 12,453' & est. top of cement @ 12,253'.

Mudlogger released 1-2-90. Geologist released 1-4-90.

BIT					SERIAL	DEPTH				ACC.	WOB		PUMP	SPM	MUD	
NO.	SIZE		TYPE	NOZZLBS		OUT		HRS.			1000#	RPM		1 - 2		VIS.
1111	******	****	*******	*******	*******	*******						******				11111
1	13 3/4"		DSJ	16-16-18	RR	1,015	787		49.2		5 5	80		109-104		
2	13 3/4"	REED	Y11	16-16-18	RR	1,268	253	4	63.3	20	55	80		109-104		
3	13 3/4"	STC	DGJ	16-16-18	RR	1,772	504	12.5	40.3	32.5	5 5	80	1150	109-104	water	
4	13 3/4"	HTC	OSC3A	16-16-18	RR	2,490	718	15	47.9	47.5	55	80	1150	109-104	water	
5	13 3/4"	HTC	J22	16-16-18	RR	2,962	472	16	29.5	63.5	60.	70	1200	109-104	water	
6	13 3/4"	HTC	R1	16-16-18	RR	3,292	330	8.5	38.8	72	60	72	1200	109-103	water	
7	13 3/4"	SEC	83J	16-16-16	RR	3,419	127	4	31.8	76	65	80	1250	109-103	water	
8	13 3/4"	SEC	83J	16-16-16	RR	3,535	116	4	29.0	80	60	72	1200	109-103	water	
9	13 3/4"	HTC	J22	16-16-16	RR	3,558	23	1.5	15.3	81.5	65	72	1200	109-103	water	
10	13 3/4"	STC	DGJ	16-16-18	RR	3,757	199	10.5	19.0	92	40/55	72	1200	109-103	water	
11	13 3/4"	STC	DGJ	16-16-18	RR	4,007	250	14.5	17.2	106.5	40/50	72/80	1200	109-103	water	
12	13 3/4"	SEC	84J	16-16-16	RR	4,149	142	8	17.8	114.5	40/58	72/80	1200	109-103	water	
13	13 3/4"	SBC	84J	14-16-16	RR	4,352	203	16.5	12.3	131	40/60	72/80	1400	109-103	water	
14	13 3/4"	VAREL	L35	16-16-16		4,437	85	8.5	10.0	139.5	40/60	72/80	1350	109-103	water	
15	13 3/4"	HTC	J22	16-16-16	RR	4,487	50	5	10.0	144.5	10/50	72/80	1350	109-103	water	•
16	13 3/4"	SEC	S4J	16-16-16		4,643	156	13	12.0	157.5	10/50	70/80	1350	108-102	water	
17	13 3/4"			16-16-16		4,902	259		10.6		45	72/80	1400	109-103	water	
18	13 3/4"		83J	16-16-16		4,955	53		6.2		35	72	1200	108-102	water	
19	13 3/4"		DSJ	18-18-16		5,013	58		8.9		40	72		108-102		
				/4" Surfa												
20	8 3/4"	HTC	ATJ33	12-12-B	_	8,153	3140	122.5	25.6	319.5	50	70	1750	109-101	water	
	8 3/4"	HTC	ATJ44	12-12-B		10,186	2033	77	26.4		50	70	1800		water	
	8 3/4"	REED	PP62B	11-12-B		10,785	599	24	25.0		50	70	1900		water	
23	8 3/4"	REED	PP63			11,348	563	38	14.8		50	70	1875		9.2	39
	8 3/4"	HTC	ATJ55R	12-12-B		11,985	637	87	7.3		50	70	2200		10.0	40
25	8 3/4"	RRED	FP63	14-14-B	RR	12,132	147		5.3	573	55	52/70	1750		10.5	40
	, .		Lost 3 C			,										
26	8 3/4"	HTC	ATJ44	14-14-B	B264D	12,510	378	65.5	5.8	638.5	50/55	52/60	1750	107-	11.1	45
27	8 3/4"	SEC	M84P	13-13-B				21.25		659.75	50	65	1200		11.6	
	• •, .			& Fishing			•		•••	***************************************						
				ntermedia												
28	6"	STC	F5	11-11-B	_		114	25	4.6	684.75	35	40	2700	72-	11.2	45
	•	•••	PU Junk		******	,				••••				-		
29	6 "	SEC	M89TF	10-10-10	400907	12,781	67	19.5	3.4	704.25	35	40	2600	96-	11.3	47
~-	•			Basket & 1			• 1		J.1							-,
30		D.O.	D262				1091	224.5		000 75	15/20	95/100	2900	۵۸_	13.5	49
	6"	KU	0404	. 35	0114839	13.514	1001	444.3	4 . n	340.13	19/60	201100	4300	30-	10.0	
31	6" 6"	BC BC	D262	.35 .35	0114859 0113330			141.5		1070.2			2950		13.7	

MUD RECORD FOR HARTMAN 2-31A3

													DAILY	CUMULATIVE
		MUD		WATER					OIL/				COST	COST
DATE	DEPTH		T VIS.		PV			SOLIDS	WATER	рĦ	C1	Ca		
				*****										**********
10-0ct-89	208	8,4	35		4		2/2	0.5	0/99.5	11.0	300	160	•	\$322
11-0ct-89	1,015	8.4	27		water					10.5	200	140	,	\$333
12-Oct-89	1,772		27		wate					11.5	250	400		\$1,129
13-Oct-89	2,522	8.4	27		water					10.0	250	140		\$3,582
14-0ct-89	3,137	8.4	27		water					10.5	250	40	•	\$4,228
15-0ct-89	3,538	8.4	27		water					10.5	275	40	\$882	\$5,110
16-Oct-89	3,820	8.4	27		water					9.5	500	40		\$6,606
17-0ct-89	4,117	8.4	26		water					11.0	600	80	\$718	\$7,324
18-Oct-89	4,283	8.4	26		water					11.5	650	80	\$353	\$7,677
19-0ct-89	4,440	8.4	26		water					11.0	800	120	-	\$8,345
20-0ct-89	4,611	8.4	26		water					10.5	1,700	480	•	\$9,000
21-0ct-89	4,780	8.4	26		water					11.5	1,000	200	\$395	\$9,395
22-Oct-89	4,918	8.4	26		water					10.0	1,000	160	\$438	\$9,833
23-Oct-89	5,014	8.4 8.4	26 26		water		D., 1A	2/48 01	rface csg		1,100 1,000	200 180	\$1,537 \$260	\$11,370 \$11,630
24-Oct-89 25-Oct-89	5,014 5,014	8.4	26		water		aun Iv	2/3 81	irrace cag	9.5	1,000	40	\$274	\$11,904
26-0ct-89	5,014	8.4	26		water					9.5	900	40	\$0	\$11,904
27-0ct-89	5,571	8.3	26		water					10.5	500	40	\$247	\$12,151
28-Oct-89	6,157	8.4	NC		water					11.0	10,000	400	\$182	\$12,333
29-Oct-89	0,10,	No Rep			## CC1					11.0	10,000	100	\$0	\$12,333
30-Oct-89	7,255	8.4	26		water					11.5	10,000	400	\$303	\$12,636
31-Oct-89		No Rep			# u 001						,		0	\$12,636
01-Nov-89	8,155	8.4	26		water					11.5	10,000	400	\$134	\$12,770
02-Nov-89	8,695	8.4	26		water					11.5	10,000	400	\$1,900	\$14,670
03-Nov-89	9,235	8.4	26		water					11.5	9,500	400	\$31	\$14,701
04-Nov-89	9,875	8.4	26		water					11.5	8,000	400	\$38	\$14,739
05-Nov-89	10,240	8.4	26		water					11.5	9,000	320	\$20	\$14,759
06-Nov-89	10,785	8.4	26		water					11.0	9,000	200	\$52	\$14,811
07-Nov-89	11,090	8.8	30	22.0	4	3	2/5	2.8	0/97.2	9.5	9,000	80	\$2,252	\$17,063
08-Nov-89	11,350	9.2	35	20.0	7	5	2/10	5.0	1/94.0	9.5	9,000	100	\$1,531	\$18,594
09-Nov-89	11,485	10.0	40	14.0	11	10	4/15	10.0	2/88.0	9.0	9,000	100	\$5,560	\$24,154
10-Nov-89	11,675	10.0	40	14.2	12	10	4/16	11.0	tr/89.0	9.5	9,000	100	\$1,630	\$25,784
11-Nov-89	11,835	10.0	40	12.0		10	4/18	11.0	2/87.0	10.0	9,000	100	\$4,269	\$30,053
12-Nov-89	11,980	10.0	40	12.0		10	4/15	10.0	3/87.0	10.0	9,000	80	\$925	\$30,978
13-Nov-89	12,030	10.0	40	11.8		10	3/14	10.0	4/86.0	10.5	9,000	80	\$658	-
14-Nov-89	12,132	10.4	38	12.0	12	8	3/11	10.0	2/88.0	10.0	9,000	80	\$5,713	
15-Nov-89	12,132	10.5	38	12.5	10	8	2/12	10.0	2/88.0	10.0	9,000	40	\$3,444	\$40,793
16-Nov-89	12,195	10.5	38	12.6	11	8	2/11	10.0	2/88.0	10.0	9,000	80	\$700	\$41,493
17-Nov-89	12,330	10.7	39	12.4		10	2/13	11.0	2/87.0	10.0	9,000		\$10,987	\$52,480
18-Nov-89	12,462	11.0	40	12.2	17	9	2/14	11.0	1/88.0	10.0	8,500	80	\$9,465	\$61,945
19-Nov-89	12,517	11.2	40	12.0	15	9	2/14	12.0	2/86.0	10.0	8,500		\$11,219	\$73,164
20-Nov-89	12,574	11.5	41	12.8		10	5/17	13.0		9.5	5,800		\$11,268	\$84,432
21-Nov-89	12,600	11.6	42 No Dec		18	10	2/11	13.0	2/85.0	9.5	5,800	٥U	\$5,408	•
22-Nov-89	12,500		No Rep										\$0 \$0	\$89,840
23-Nov-89	12,600		No Rep		10	11	9/10	14 0	1/85.0	10.0	5,000	80	\$4,403	\$89,840
24-Nov-89	12,600	11.6		10.8			2/17			9.5	5,200	40	\$5,674	\$94,243 \$99,917
25-Nov-89	12,600	11.6		13.2	19	J	4/11	3.0	61/31.V	3.0	2,200	10		\$99,917
26-Nov-89	12,600		No Rep	UEL									₽V	400,011

MUD RECORD FOR HARTMAN 2-31A3

													DAILY	CUMULATIVE
		MUD		WATER					OIL/				COST	COST
DATE	DBPTH		r vis.			y P	GRLS	SOLIDS		рH	Cl	Ca		

27-Nov-89	12,600	11.6	50	12.0	20	10	2/6	12.0		9.0	4,000		-	\$118,735
28-Nov-89	12,600	11.6	41	10.0	19	9	2/7	12.0	tr/88.0	9.0	2,200	40		\$131,013
29-Nov-89	12,600		No Rep	ort										\$131,013
30-Nov-89	12,600	11.6	46	9.4	20	11	2/12	13.0	0/87.0	10.5	2,200	40		\$139,436
01-Dec-89	12,600		No Rep											\$139,436
02-Dec-89	12,600	11.6	44	9.2	19	10	2/8	13.0		10.5	2,200	40		\$143,026
03-Dec-89	12,600	11.6	44	9.0	19	11	2/9	13.0	0/87.0	10.5	1,600	40	\$11,207	\$154,233
04-Dec-89	12,600	11.6	45	7.0	21	10	2/8	14.0	0/86.0	9.0	1,700	80		\$167,962
05-Dec-89	12,600	11.6	45	9.0	21	12	2/8	13.0	0/87.0	10.0	2,000	80	\$2,787	\$170,749
06-Dec-89	12,600	11.5	45	8.0	18	11	2/10	12.0	tr/88.0	11.5	1,600	60	\$436	\$171,185
07-Dec-89	12,600	11.5	44	7.6	19	10	2/11	12.0	0/88.0	11.5	1,600	0	\$1,876	\$173,061
08-Dec-89	12,600		No Rep	ort										
09-Dec-89	12,600	11.1	40	8.2	13	6	2/5	9.0	0/91.0	9.0	1,300	120	\$2,965	\$176,026
10-Dec-89	12,600	11.0	42	10.2	14	6	2/6	9.0	0/91.0	9.0	1,300	80	\$4,891	\$180,917
11-Dec-89	12,600	11.0	52	9.0	18	16	9/17	10.0	0/90.0	12.0	1,400	0	\$7,264	\$188,181
12-Dec-89	12,634	11.2	45	10.4	18	13	3/14	11.0	0/89.0	11.5	1,600	0	\$1,146	\$189,327
13-Dec-89	12,714	11.3	48	10.0	19	12	2/14	12.0	0/88.0	11.5	1,500	0	\$3,761	\$193,088
14-Dec-89	12,765	11.3	47	9.6	23	12	2/10	12.0	tr/88.0	11.0	1,500	40	\$1,273	\$194,361
15-Dec-89	12,793	11.4	50	10.2	21	12	3/13	12.5	tr/87.5	11.0	1,500	tr	\$3,892	\$198,253
16-Dec-89	12,913	12.1	55	9.8	22	12	3/14	14.0	2/84.0	11.0	1,500	40	\$4,274	\$202,527
17-Dec-89	12,989	12.2	55	8.4	32	14	5/14	14.5	2/83.5	10.5	1,500	40	\$8,535	\$211,062
18-Dec-89	13,085	12.3	51	8.6	25	13	4/11	17.0	1/82.0	10.5	1,200	40	\$3,997	\$215,059
19-Dec-89	13,200	12.5	52	7.6	20	14	3/9	17.0	1/82.0	9.5	1,200	40	\$6,494	\$221,553
20-Dec-89	13,307	13.1	53	7.0	31	15	3/10	20.0	2/78.0	10.0	1,200	40	\$8,471	\$230,024
21-Dec-89	13,382	13.3	50	7.2	25	13	3/11	20.0	2/78.0	9.5	1,400	40	\$3,839	\$233,863
22-Dec-89	13,478	13.3	53	7.0	30	13	4/12	19.0	2/79.0	9.5	1,400	60	\$1,028	\$234,891
23-Dec-89	13,580	13.4	50	7.0	27	16	4/9	20.0	1.5/78.5	9.0	1,400	60	\$6,116	\$241,007
24-Dec-89	13,670	13.4	51	7.2	27	15	3/9	20.0	1/79.0	9.0	1,400	60	\$2,291	\$243,298
25-Dec-89	13,785	13.5	51	7.0	33	15	3/9	20.0	tr/80.0	10.0	1,400	60	\$4,130	\$247,428
26-Dec-89	13,812	13.5	50	7.0	32	14	3/8	20.0	tr/80.0	10.0	1,400	60	\$333	\$247,761
27-Dec-89	13,939	13.4	59	7.8	39	19	4/13	20.0	tr/80.0	10.5	1,400	40	\$3,987	\$251,748
28-Dec-89	14,058	13.6	56	7.2	30	22	7/14	20.5	tr/79.5	10.0	1,500	40	\$3,664	\$255,412
29-Dec-89	14,198	13.6	49	6.6	34	10	4/6	20.0	1/79.0	9.0	1,400	80	\$6,905	\$262,317
30-Dec-89	14,321	13.5	52	6.6	30	14	3/8	20.0	tr/80.0	9.5	1,400	60	\$5,151	\$267,468
31-Dec-89	14,405	13.5	50	6.4	32	14	2/6	20.0	tr/80.0	9.5	1,400	60	\$4,066	\$271,534
01-Jan-90	14,600	13.7	57	7.0	36	17	4/15	22.0	tr/88.0	10.5	2,000	tr		\$276,004
02-Jan-90	14,600	13.7	50	7.2	34	14	4/8	22.0	tr/78.0	9.5	2,000	tr		\$276,004
03-Jan-90	14,595	13.7	52	7.4	34	16	4/9	22.0	tr/?8.0	9.5	2,000	tr	\$182	\$276,186
04-Jan-90	14,595	13.7	56	7.0	34	18	4/12	22.0	tr/78.0	10.0	2,200	tr		\$276,858

PQR4 25 - 789 (1)

NOTIFICATION AND INFORMATION REQUIREMENTS

NOTIFICA	HON	ANU	INI	OH	IMA	110	N RE	QUI	No.	MEN	ITS					
Pennzoil Company #2-31A3 Hartman 31-T1S-R3W LETTERS Pennzoil Company P.O. Box 2967 Houston, TX 77252-2967 Pennzoil Company Pennzoil Company Houston, TX 77002	y	AFE & Well Prognosis	Slate Permits, Reports, Survey, etc.	Daily Druking Reports - Phone	Only Oriting Reports - Mail	raceing cogs - 1 total E (IIII)	Electric Lone - Field Dring	Electrical Age - Figure Briefe	Electric Logs - Film Prints	Electric Logs - Tape LIS Format	Log Telecopies as needed	Cores, Logging, Plugging, etc.	Fluid Analysis, etc.	Reports - DST, Geological, Completion,	Daile 14 . d lane Cincillation	Cutting of samples
Pennzoil Company P.O. Box 2967 - 10th Floor Houston, TX 77252-2967 Attn: Greg Stevens Office: (713) 546-8399	1		2	1	1	2	2	1			1	1	2.	182	2 1	
Pennzoil Company P.O. Box 290 Neola, UT 84053 Attn: Will Luna	2	1		0	0	1	0	0	C	,	0	1	1	041	0	
Proven Properties, Inc. 700 Milam, 8th Floor Houston, TX 77002 Attn: Rick Carter	1	1		0	1	1	2	0	a		1	2	2	142	0	
Utah Oil, Gas & Mining West North Temple Suite 350 Salt Lake City, UT 84180	0	i		D	0	0.	1	0	0		0	0	1	0&1	0	-
ANR Production 600 17th Street, Suite 800S P. 0. Box 749 Denver, CO 80202 Attn: Rick Liebling	2	1		1	1	2	2	0	. 0	-	1	1	2	182	0	_
Forcenergy, Inc. 2730 SW 3rd Ave., Suite 800 Miami, FL 33129-2237	2	1	C)	1*	1	1	0	0			1	1	181	0	
GID Energy Development Co. 2401 Fountainview Dr. 1, Suite 700 Houston, TX 77057	2	1	0	,	1*	1	1	0	0]		1	1	181	0	
Convest Energy Corporation 2401 Fountainview Drive, #700 Houston, TX 77057	2	1	0		1*	1	1	0	0	1		1	1	181	0	
Affiliated Western 7700 E. Arapahoe Suite 330 Englewood, CO 80112	2	1	0		1*	1	1	0	0	1		1	1	1&1	0	
Total weekly	14	10	2	3	14	10	11	1	1	7		9	12	7412	1	
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STATE OF STAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING

SUBMIT IN DUPLEMENTE*
(See other instructions on reverse side)

Confidentia

			IL, GAS, A						5 I PAGE 1	DESIGNATION AND SE	RIAL NO.
	210.0.0	0. 0	IL, GAS, A	IAD MILIALI			a coc	erated (m	J. LEASE	JES	GL
WELL CO	MPI FI	ION (OP PECC	A ADI ETI					6. IF INDIA	AN, ALLOTTEE OR TRE	
1a. TYPE OF WE	LL:			MPLEII	ON KE	PURT A	שאו	LOG		LIS	
b. TYPE OF COM	ADI ETTON	WELL	XX WELL	LJ pa	ા 📙 ુંબ્	Per MAY	04	1990 🚰	7. UNIT AG	REEMENT NAME	-
NEW XX	work _	DEEP-		DIFF		,					
2 NAME OF OPPA	TOR	L EN	LJ BACK	L_ RESV		12:00	SION	च् र ा	_	TAC	
Pennz	oil Exp	plorat	ion and F	roducti	on Compa	iny ^{ML, SA}	SEM		Hartma		OEII M
3. ADDRESS OF OPI	ERATOR				************	······································			2-3143	10.0010	
			iston, TX						10. PIELD	AND POOL, OR WILDCA	
4. LOCATION OF WE	LL (Repor	t location	clearly and in	accordance	with any S	tate requiren	nents)*			11/Altamont	
At surface 2	437 FSI	r 120;	5 FWL						11. SEC., T.	, R., M., OR BLOCK AND	SURVEY
At top prod. in	terval repo	orted below	*							, T1S, R3W	
At total depth)						Sec 31	, 115, KJW	
				14. PER	MIT NO.	DA	TE ISSI	ED	12. COUNTY	OR 13. STAT	E
					3-31243	1	9/10		Duches		_
5. DATE SPUDDED	16. DAT	E T.D. REA	CHED 17. DA	TE COMPL. (RT, GR, ETC.)*		
9/12/89		1/90		/7/90		1 -		22.65	·	GL 6302.6	
O. TOTAL DEPTH, MD	4 TVD		BACK T.D., MD &	TVD 22.	IF MULTIPE	E COMPL.,	23	INTERVALS DRILLED BY	ROTARY TO	OLS CABLE TO	OLS
14595		1453						>	XX		-
4. PRODUCING INTE	RVAL(S). O	F THIS CO	MPLETION-TO	P, BOTTOM, P	NAME (MD A	AND TVD) *				25. WAS DIRECT	
12818	-14476	Was	satch							No	
6. TYPE ELECTRIC				······································					· · · · · · · · · · · · · · · · · · ·	27. WAS WELL COR	ED
Sonic D	IL-GR									No	•
8.			CAS	ING RECOR	D (Report	all strings se	et in we	<i>u</i>)		<u> </u>	
CASING SIZE		TT, LB./FT.	Tentania and an annual an annual and an annual an annual and an annual and an annual and an annual and an annual an annual and an annual an an		HOLE S	SIZE		CEMENTING	RECORD	AMOUNT PU	ILLED
10.75 7.00	51	5/29/32	501	Į.) sxs			
7.00	23/20		126		to a complete property and the complete prop		2050	sxs			
Constitution of the property of the state of			per kedesking serveya ayana sarakasa							1	
) .		LU	NER RECORD)	·		30.		TUBING REC	ORD	
BIZE	TOP (MI		OTTOM (MD)	SACKS CEX	ENT' SC	REEN (MD)	- -		DEPTH SET ()		(MD)
5.0	12453		14593	-		· · · · · · · · · · · · · · · · · · ·	_				
			***************************************	-				·			
1. PERFORATION RE	CORD (Inter	rval, sis	and number)		82	2.	ACID, S	SHOT, FRACT	URE, CEMEN	T SQUEEZE, ETC.	
	1			•		EPTH INTER	VAL (M	D) A35	OUNT AND KI	ND OF MATERIAL USE	D
see attach	nea	•					 		cohod		
						·		see att	ached	 	
										· · · · · · · · · · · · · · · · · · ·	<u> </u>
3.•	T WE				PRODUC'			····			
TE FIRST PRODUCT	108		ON METHOD (Flowing, gas	lift, pumpi	ng—size and	type o	f pump)		STATUS (Producing	or
4/7/90			owing		January States and Sta				Pro	ducing	
TE OF TEST	носка т 24	ESTED	26/64	PROD'N. TEST PI	RIOD	ь —вы. 692	1	900	WATER—BBI		,
4/7/00	1	PRESSURE	CALCULATED	01L88		GAS-MC		WATER-	48	1300	000 \
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ow. Tubing Press. 550 L. DISPOSITION OF G SOld L. LIST OF ATTACH	MENTS	oregoing a	el, vented, etc.		s complete	and correct	as dete	rmined from	all available t		· · · · ·

*(See Instructions and Spaces for Additional Dataton Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal and/or State laws and regulations. Any sevessary appeals instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on Items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached herefor to the extent required by applicable Federal and/or State laws and regulations. All attachments

should be listed on this form, see item 35.
Hers 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. or Federal office for specific instructions.

Hems 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval interval.

For each additional interval to be separately produced, showing the additional data pertinent to such interval.

Hem 29: "Sacks Cement". Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Hem 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

	Tot	TEUR VERT. DEPTE									
GROLOGIC MARKERS		MEAS. DEPTH	5946 9925 11092 11345 13622 14458								
88. GEOLA	RVVR		GRRV GTGR3 GCP70 GRTU2 WS200 WSTFL								
\$7. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT EDIES OF POROSITY AND CONTENTS TREEBOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, PLOWING AND SHUT-IN PRESSURES, AND RECOVERIES	DESCRIPTION, CONTENTS, STC.										
	MOLLOR										
RTANT KONES OF POI TESTED, CUSHION	TOP										
61. SCHAMEANE OF FOR 6HOW ALL IMPOI DEPTH INTERVAL	FORMATION										

HARTMAN #2-31A3 DRILLING REPORTS

<u>DEV - Hartman #2-31A3 - Utah - Duchesne - Bluebell/Altamont - Pennzoil - PZL W.I. 42.329002% - PD 14,500' - Sec. 21, T1S, R2W, AFE #07096073 - AFE Cost \$1,810,000</u>

This well was permitted 2437' FSL & 1505' FWL in the NESW Section 31, T1S-R2W, Duchesne County, Utah, API #43-013-31243. Road and location have been finished. The well was spudded with rathole machine at 10:00 AM on 09/12/89. 16" conductor pipe was set and cemented to surface at 208' below GL.

10/07/89: G.L. 6302.6'

Rig Phone (801) 454-3346

Geologist and Mud Logger Phone (801) 454-3345

API #43-013-31243

16" @ 208' below GL. Started MIRT.

10/08/89: 16" @ 208' below GL. Cont MIRT & started RURT.

10/09/89: 16" @ 208' below GL. Finished MIRT & cont'd on RURT.

10/10/89: CTD \$36,249

Day 01

860', drilling, made 692' in 15 hrs (spudded w/drlg rig @

2:00 PM on 10/10/89) f wtr, 1/2° @ 425', 1-1/4° @ 821'.

10/11/89: CTD \$158,931

Day 02

1730', drilling, made 870' in 16.5 hrs, f wtr, 1° @ 1015' &

3/4° @ 1443′.

10/12/89: CTD \$190,652

Day 03

2490', RTCB, made 760' in 17 hrs, f wtr, 3/4° @ 2211.

10/13/89: CTD \$208,035

Day 04

2962', RTCB, made 472' in 16 hrs, f wtr, 1° @ 2645', 1-1/4°

@ 2962'.

10/14/89: CTD \$219,446

Day 05

3419', drilling, made 457' in 13.5 hrs, f wtr, 1-1/4° @

3290'.

10/15/89: CTD \$

Day 06

3713', drilling, made 294' in 13 hrs, f wtr, 3/4° @ 3535'.

10/16/89: CTD \$239,420

Day 07

4000', RTCB, made 294' in 17 hrs, f wtr, 3/4° @ 3757'.

10/17/89: CTD \$246,769

Day 08

4160', drilling, made 153' in 8 hrs, f wtr, 1-1/4° @ 4007'.

10/18/89: CTD \$252,978

Day 09

4382', drilling, made 222' in 18 hrs, f wtr chlorides are

increasing very slowly, 1-1/2° @ 4352'.

10/19/89: CTD \$257,179

Day 10

4487', RTCB, made 102' in 10.5 hrs, f wtr, 1° @ 4437'.

10/20/89: CTD \$262,764

Day 11

4676', drilling, made 189' in 16 hrs, f wtr, 3/4° @ 4643'.

10/21/89: CTD \$268,881

Day 12

4902', RTCB w/SLM, made 226' in 21.5 hrs, f wtr.

10/22/89: CTD \$271,830

Day 13

4978', drilling, made 76' in 11.5 hrs, f wtr, 1° @ 4955'.

10/23/89: CTD \$304,911

Day 14

5014', WOC, made 86' in 3.5 hrs, f wtr, 3/4° @ 5014' (drilled to 5014'. Circ out. POOH. RU & ran 10-3/4" csg to 5014'. Mixed & pumped cmt. Circ 20 bbls +/- cmt. Amt of fall back has not been determined. Now waiting on cmt).

10/24/89: Day 15

5014', on NU of BOP stack (ran 116 jts [5021.91'] 10-/34" 51# N-80/K-55, ST&C set & cmt'd 5014', cmt 10-3/4" w/2650 sxs & circ out 106 sxs +/-. Cmt fell back to 335'. Finished WOC & WO cmt for 1" job. Mixed & pumped 254 sxs thru 1" @ 335'. Circ out 11 sxs +/- & cmt fell back to 28'. Will fill w/ready mix. ND & cut off. Weld on csg head & test w/2200 psi, 10 min OK. Start NU of BOP stack),

f wtr.

10/25/89: CTD \$319,326

Day 16

5014', PU BHA w/8-3/4" bit (finish NU BOP stack & test same. Changed out element in Hydril. Start PU BHA to drill

out), f wtr.

10/26/89:

CTD \$332,665

Day 17

5435', drilling, made 421' in 17.5 hrs (finish PU BHA. TIH. Test 10-3/4" csg w/3500 psi - 0 out. Made 15' of new hole. Ran leak off test, 1200 psi w/f wtr for an EMW of 12.98#. Resumed drilling.) f wtr, $3/4^\circ$ @ 5014'.

10/27/89:

CTD \$350,323

Day 18

5928', drilling, made 493' in 21.5 hrs, f wtr, 1° @ 5500',

BG 2 units.

10/28/89:

CTD \$366,216

Day 19

6564', drilling, made 636' in 23 hrs, f wtr, 1° @ 6020' &

6499', BG 216 units.

10/29/89:

CTD \$382,342

Day 20

7170', drilling, made 606' in 23 hrs, f wtr, 1° @ 7021', BG

190 units.

10/30/89:

CTD \$392,888

Day 21

7796', drilling, made 626' in 23 hrs, f wtr, 1° @ 7513', BG

240 units.

10/31/89:

CTD \$402,499

Day 22

8153', reaming to btm w/net bit, made 357' in 13.5 hrs, f

wtr, 1-1/2° @ 8067', BG 310 units.

11/01/89:

CTD \$414,843

Day 23

8625', drilling, made 472' in 18.5 hrs, f wtr, 1-1/4° @

8556', BG 170 units.

11/02/89:

CTD \$431,134

Day 24

9180', drilling, made 555' in 23 hrs, f wtr, 1-1/2° @ 9079',

BG 224 units.

11/03/89:

CTD \$447,715

Day 25

9800', drilling, made 620' in 22 hrs, f wtr, 1° @ 9648', BG

300 units.

11/04/89:

CTD \$458,655

Day 26

10,190', drilling, made 390' in 14.5 hrs, f wtr, 1-3/4° @

10,186', BG 600 units.

11/05/89: CTD \$473,560

Day 27

10,785', drilling, made 595' in 23.5 hrs, f wtr, BG 2800

units.

11/06/89: CTD \$481,219

Day 28

11.040', drilling, made 255' in 14.5 hrs, gel wtr @ 8.7# mud

wt, 32 vis, 2° @ 10,785', BG 1100 units.

11/07/89: CTD \$492,725

Day 29

11,348', drilling, made 308' in 23.5 hrs, 9.1/9.0# mud wt,

36 vis, 22 WL, BG 4800 units.

11/08/89: CTD \$499,210

Day 30

11,472', drilling, made 124' in 13 hrs, 10/9.8# mud wt, 38

vis, 20 WL, 2-1/2° @ 11,348', BG 4000 w/no flare.

11/09/89: CTD \$506,658

Day 31

11,647', drilling, made 175' in 23.5 hrs & lost 27 bbls mud,

10/9.7# mud wt, 41 vis, 20 WL, BG 3000 units w/1' flare.

11/10/89: CTD \$520,849

Day 32

11,807', drilling, made 160' in 23.5 hrs, 10/9.6# mud wt, 40

vis. 14.2 WL, BG 2400 units w/1' flare.

11/11/89: CTD \$530,373

Day 33

11,964', drilling, made 157' in 23.5 hrs, 10/9.6# mud wt, 40

vis, 12 WL, BG 3600 units w/2' flare.

11/12/89: CTD \$534,215

Day 34

12,006', drilling, made 42' in 8.5 hrs (trip for bit & ck DC

for 15 hrs), survey @ 11,985' 2-1/2°, 10/9.7#, 40 vis, 12

WL, BG 3700 units w/2' flare.

11/13/89: CTD \$539,571

Day 35

12,137', drilling, made 131' in 23 hrs 10.5/10# mud wt, 42

vis, 11.8 WL, BG 3000 units w/2' flare. Mud loss today is

197 bbls. cum loss 247 bbls.

11/14/89:

CTD \$676,327

Day 36

12,137', TIH w/magnet (circ for samples. TOOH w/bit, lost 3 cones. TIH w/magnet. TOOH, rec 1 cone. TIH w/magnet), 10.5/10# mud wt, 38 vis, 12 WL, BG 1800 units w/2' flare, survey @ 12,137' 1-1/6°. Mud loss today 72 bbls, cum loss 319 bbls.

11/15/89:

CTD \$682,243

Day 37

12,170', drilling, made 33' in 6 hrs (TIH w/magnet, circ & fish for junk. TOOH, rec all junk. TIH w/new bit, drill), 10.6/10.3# mud wt, 38 vis, 12.5 WL, BG 2310 units w/no flare. Mud loss today 40 bbls, cum loss 349 bbls.

11/16/89:

CTD \$688,678

Day 38

12,318', drilling, made 148' in 23.5 hrs 10.8/10.5# mud wt, 42 vis, 12.6 WL, BG 700 units w/no flare. Mud loss today 336 bbls, cum loss 685 bbls.

11/17/89:

CTD \$704,775

Day 39

12,446', drilling, made 128' in 23.5 hrs 11.0/11.0# mud wt, 42 vis, 12.4 WL, BG 80 units w/no flare.

11/18/89:

CTD \$720,195

Day 40

12,510', RTCB, made 64' in 12.5 hrs, 11.1/11.0# mud wt, 44 vis, 12.2 WL, 1° @ 12,510', BG 65 units w/no flare.

11/19/89:

CTD \$737,485

Day 41

12,563', drilling, made 53' in 12.25 hrs (lost 658 bbls, cum loss 2,099 bbls), 11.5/11.5# mud wt, 42 vis, 12 WL, BG 1800 units.

11/20/89:

CTD \$756,073

Day 42

12,600', circ & cond mud for logging, made 37' in 9 hrs (mud loss cont'd & stopped @ 12,600' to run 7" intermediate csg. Lost 414 bbls, cum loss 2513 bbls, wellbore is stable @ this time w/no mud loss. Cond for logging), 11.7/11.6# mud wt, 41 vis, 12.8 WL, 1° @ 12,510', BG near 0 @ 6:00 AM.

11/21/89:

CTD \$768,191

Day 43

12,600', working stuck DLL @ 10,500' (cond mud & POOH to log. RU Schlumberger & TIH. Got stuck @ 10,500'. Now working logging tools to free same. Lost 63 bbls mud, cum loss 2576 bbls), 11.6/11.5# mud wt, 42 vis, 11.6 WL, BG 1600 units.

11/22/89: CTD

CTD \$775,555

Day 44

12,600', on TIH w/overshot to recover DLL logging tool that is stuck @ 10,500' (unable to work & pull logging tool free. RU - cut logging cable & start TIH w/O/S - stripping over logging cable), 11.6/11.6# mud wt, 45 vis, 11 WL.

11/23/89:

CTD \$787,864

Day 45

12,600', on POOH w/logging tool (finish TIH - enganged fish & pull same free. Pull cable out of rope socket & start POOH), 11.6/11.6# mud wt, 44 vis, 11 WL.

11/24/89:

CTD \$806,410

Day 46

12,600', on btm conditioning mud to resume logging (finished POOH w/fish - full rec. TIH w/bit @ 10,500' +/- lost 560 bbls of mud & lost another 658 bbls getting to btm & start circ to clean up mud system) 11.6/11.3# mud wt, 43 vis, 10.8 WL.

11/25/89:

CTD \$822,361

Day 47

12,600', logging w/DLL (finished cleaning & cond mud system - heat mud to 150° F & circ it around clean parafin & LCU from well-bore. POOH & RU Schlumberger - now running DLL), 11.6/11.4# mud wt, 42 vis, 13.2 WL.

11/26/89:

CTD \$847,352

Day 48

12,600', on TIH @ 7500' circ hot mud around (finished logging runs & start TIH), 11.6/11.6# mud wt, 42 vis, 12.1

11/27/89:

CTD \$874,535

Day 49

12,600', circ w/100% returns (finish circ w/180° mud @ 7500' +/-. TIH to 10,000' +/-. Broke circ & started losing mud - then lost total returns. Regained circ & displaced hot mud w/cold mud. Dropped mud temp 110°F +/-), 11.6/11.6# mud wt, 50 vis, 12 WL.

11/28/89:

CTD \$902,829

Day 50

12,600', on R/U to run Sonic log (displace hot mud w/cold mud dropped mud temp @ 110°F @ pump suction. RU to temp log looking for mud loss zone. TIH losing 11# mud & reaming out bridge @ 12,429'. Circ hot mud around, flowline temp 127°F. POOH to log. RU loggers), 11.6/11.4#, 47 vis, 10 WL, no BG.

11/29/89:

CTD \$963,390

Day 51

12,600', on TIH to cond mud & wellbore for running of 7" csg (finished RU to log. Ran Sonic & FMS logs & started TIH), 11.6# mud wt, 47 vis, 10 WL.

11/30/89:

CTD \$979,994

Day 52

12,600', letting liquid csg/DM seal pill soak into permeable zones (TIH to 3000', broke circ. TIH to 7513', broke circ & lost returns while cleaning up mud system. TIH to 9738'. Mixed & pumped 100 bbl pill of liquid csg/DM seal outside drill sting - 9700-7700', letting pill soak), 11.6# mud wt,

46 vis, 9.4 WL.

12/01/89:

CTD \$990,847

Day 53

12,600', attempting to seal up well bore w/liquid csg & DM seal (worked w/lst pill. Mixed & pumped 2nd pill, 85 bbls, sqz pills into permeable zones w/40 psi surf press on annulus), 11.6/11.5# mud wt, 44 vis, 9.4 wl.

12/02/89:

CTD \$1,002,048

Day 54

12,600', circ & cond mud in preparation to run 7" csg (cont to work w/liquid csg & DM seal pills, # 1 & 2, to plug up permeable zones. Improved wellbore cond but did not get 100% shut off. Finished sealing up wellbore w/LCM, then started shaking LCM out of the mud), 11.6/11.6# mud wt, 46 vis, 9.4 WL.

12/03/89:

CTD \$1,033,059

Day 55

12,600', LD drill string to run 7" intermediate csg (finished removing LCM from mud. Added 5#/bbl liquid csg to mud system. Started LD drill string. W/bit @ 9018' mixed & pumped 50 bbls pill over lost circ zone. Cont LD drill string), 11.6/11.5# mud wt, 45 vis, 7 WL.

12/04/89:

CTD \$1,044,849

Day 56

12,600', @ 4524' running 7" csg (finished LD drill string. RU & run 7" csg), 11.6# mud wt, 44 vis, 7 WL.

12/05/89:

CTD \$1,044,849

Day 57

12,600', @ 8816' running 7" csg w/full returns (ran 7" csg to 4859' & broke circ & circ mud around. Ran 7" csg to 6852' & circ out to 7700' & circ 30 min to 8816'), 11.6/11.6# mud wt, 44 vis, 9 WL.

12/06/89: CTD \$1,051,986

Day 58

12,600', on btm w/7" csg - preparing to mix & pump 1st stg cmt (24 hrs running 7" csg), 11.6# mud wt, 45 vis, 8 WL.

12/07/89: CTD \$1,074,858

Day 59

12,600', on BOP ND to set csg slips & cut off (circ & work csg. Mix & pump 1st stage cmt - 1050 sxs w/out returns - had 550 psi of lift. Open DV & could not circ. Ran tracer survey. Mud loss @ 6035 +/-. Mix & pump 2nd stage cmt - 1000 sxs - w/full returns. Bumped plug @ 5:30 AM & closed DV tool. Start ND of BOP's), 11.5# mud wt, 44 vis, 7.6 WL.

12/08/89: CTD \$1,124,644

Day 60

12,600', @ 1063' PU 3-1/2" DP (finished ND BOP's, set slips w/225,000#, cut off 7" csg. Tested BOP stack & etc, OK. RU & started PU 3-1/2" drill string), 11.5# mud wt, 44 vis, 7.6 WL.

12/09/89: CTD \$1,156,044

Day 61

12,600', @ 11,874' prep to drill out cmt (finished PU 3-1/2" drill string. Drld cmt & DV tool from 8356-8374'. TIH to 11,874' & test 7" csg to 4000 psi), 11.1# mud wt, 40 vis, 8.2 WL.

12/10/89: CTD \$1,403,321

Day 62

12,600', @ 12,086' Drld cmt (testing 7" csg from 11,874' to surf w/4000 psi - 15 mins, OK. Clean up mud system & drill cmt for 7 hrs) 11# mud wt, 42 vis, 10.2 WL.

12/11/89: CTD \$1,481,030

Day 63

12,621', drilling, made 21' in 4 hrs (finished drilling out & made 15' of new hole. Ran leak off test. Csg seat tested to 13.86# EMW. Resumed drilling operations. Total mud loss to GR 7,931 bbls. Future mud loss will be in the Wasatch.), 11.2/11.2# mud wt, 52 vis, 9 WL.

12/12/89: CTD \$1,506,518

Day 64

12,714', RTCB, made 93' in 21 hrs, 11.2+/11.2# mud wt, 45 vis, 10.4 WL, BG 100 w/no flare.

12/13/89: CTD \$1,520,328

Day 65

12,750', drilling, made 36' in 10 hrs, 11.3/11.3# mud wt, 48 vis, 10 WL, BG 10 w/no flare. Daily mud loss 0.0 bbls & cum Wasatch mud loss 0.0 bbls.

12/14/89:

CTD \$1,541,297

Day 66

12,781', RTCB, made 31' in 9.5 hrs, 11/3-11/3# mud wt, 47

vis, 9.6 WL, BG 25 units w/no flare, no mud loss.

12/15/89:

CTD \$1,551,910

Day 67

12,865', drilling, made 84' in 11 hrs, 12.1/12.0# mud wt, 52

vis, 10.2 WL, BG 1080 units w/no flare, daily mud loss 0.0

bbls, cum Wasatch mud loss 0.0 bbls.

12/16/89:

CTD \$1,562,825

Day 68

12,944', drilling, made 79' in 12 hrs, 12.1/12.0# mud wt, 55

vis, 9.8 WL, BG 1200 units w/no flare, daily mud loss 381

bbls, cum mud loss 381 bbls.

12/17/89:

CTD \$1,578,531

Day 69

13,050, drilling, made 106' in 22.5 hrs, 12.2+/12.0# mud wt,

53 vis, 8.4 WL, BG 1280 units w/no flare, daily mud loss 40

bbls, cum mud loss 421 bbls.

WESTERN DIVISION DAILY DRILLING & COMPLETION REPORTS 1/12/90 1

Hartman #2-31A3
DEV - Duchesne County, Utah - Bluebell/Altamont Field
Sec 31, T1S, R3W - Pennzoil - PZL W.I. 42.329002% - PD 14,500' - AFE #
07096073 - AFE cost \$1,810,000

G.L. 6302.6' Rig phone (801) 454-3346

Geologist & mud logger phone (801) 454-3345

12/15/89 CTD \$1,551,910 Day 67

12,865', drilling, made 84' in 11 hrs, 12.1/12.0# mud wt, 52 vis, 10.2 WL, BG 1080 units w/no flare, daily mud loss 0.0 bbls, cum Wasatch mud loss 0.0 bbls.

12/16/89 CTD \$1,562,825
Day 68
12,944', drilling, made 79' in 12 hrs, 12.1/12.0# mud
wt, 55 vis, 9.8 WL, BG 1200 units w/no flare, daily mud
loss 381 bbls, cum mud loss 381 bbls.

12/17/89 CTD \$1,578,531
Day 69
13,050, drilling, made 106' in 22.5 hrs, 12.2+/12.0#
mud wt, 53 vis, 8.4 WL, BG 1280 units w/no flare, daily
mud loss 40 bbls, cum mud loss 421 bbls.

12/18/89 CTD \$1,591,152
Day 70
13,168', drilling, made 118' in 23.5 hrs, 12.4/12.0#
mud wt, 51 vis, 8.6 WL, BG 1400 units w/5' flare, daily
mud loss 227 bbls, cum mud loss 648 bbls.

12/19/89 CTD \$1,606,693
Day 71
13,278', drilling, made 110' in 23.5 hrs, 12.7/11.9#
mud wt, 52 vis, 7.6 WL, BG 7080 units w/15' flare,
daily mud loss 0.0 bbls, cum mud loss 648 bbls.

12/20/89 CTD \$1,622,508
Day 72
13,355', drilling, 77' in 23.5 hrs, 13.3/13.0# mud wt,
53 vis, 7 WL, BG 1200 w/no flare, daily mud loss 78
bbls, cum mud loss 726 bbls.

1/12/90

CTD \$1,634,898 12/21/89 Day 73 13,444', drilling, made 89' in 23.5 hrs 13.3/13.3# mud wt. 53 vis, 7.2 WL, BG 600 units w/no flare, daily mud loss 10 bbls, cum mud loss 736 bbls. CTD \$1,651,643 12/22/89 Day 74 13,544', drilling, made 100' in 23.5 hrs, 13.3/13.1# mud wt, 52 vis, 7 WL, BG 3200 units w/no flare, daily mud loss 143 bbs, cum mud loss 879 bbls. 12/23/89 CTD \$1,664,399 Day 75 13,645', drilling, made 101' in 23.5 hrs, 13.4/13.1# mud wt, 54 vis, 7 WL, BG 1040 units w/no flare, daily mud loss 30 bbls, cum mod loss 909 bbls. 12/24/89 CTD \$1,676,040 Day 76 13,735', drilling, made 90' in 21.5 hrs, 13.4/13.2# mud wt. 51 vis. 7.2 WL, BG 2000 units w/no flare, daily mud loss 50 bbls, cum mud loss 959 bbls. CTD \$1,687,161 12/25/89 Day 77 13,812', on RTCB & ch DC, made 77' in 16.5 hrs, 13.5/13.3# mud wt, 49 vis, 7 WL, BG 400 units w/no flare, daily mud loss 0.0 bbls, cum mud loss 959 bbls. CTD \$1,706,342 12/26/89 Day 78 13,890', drilling, made 78' in 14 hrs, 13.5/13.3# mud loss, 50 vis, 7 WL, BG 400 units w/no flare, daily mud loss to seepage on RTCB 70 bbls, cum mud loss 1029 bbls. 12/27/89 CTD \$1,717,484 Day 79 14.014', drilling, made 124' in 23 hrs, 13.5/13.4# mud wt, 52 vis, 7.8 WL, BG 200 units w/no flare, daily mud loss 10 bbls, cum mud loss 1039 bbls. CTD \$1,728,731 12/28/89 Day 80 14,151', drilling, made 137' in 23.5 hrs, 13.5/13.3#

mud wt, 50 vis, 7.2 WL, BG 560 units w/no flare, daily mud loss to seepage 67 bbls, cum mud loss 1106 bbls.

12/29/89

CTD \$1,742,667

Day 81

14,285', drilling, made 134' in 23.5 hrs, 13.5/13.4# mud wt, 58 vis, 6.6 WL, BG 320 units w/no flare, daily mud loss 6 bbls, cum mud loss 1112 bbls.

12/30/89

CTD \$1,754,729

Day 82

14,390', drilling, made 105' in 20 hrs, 13.5/13.3# mud wt, 52 vis, 6.6 WL, BG 320 units w/no flare, daily mud loss nil, cum mud loss 1112 bbls.

12/31/89

CTD \$1,777,478

Day 83

14,526', drilling, made 136' in 23.5 hrs, 13.6/13.5# mud wt, 77 vis, 6.4 WL, BG 700 units w/no flare, daily mud loss 25 bbls, cum mud loss 1137 bbls.

1/01/90

CTD \$1,789,702

Day 84

14,600', circ for logs @ TD, made 74' in 14 hrs (reached TD & circ out. Made 23 std short trip. Had 7' of fill now on cond mud for POOH to log), 13.7/13.5# mud wt, 58 vis, 7.2 WL, BG 400 units w/no flare, daily mud loss 0 bbls, cum mud loss 1137 bbls.

1/02/90

CTD \$ 1,797,305

Day 85

12,595' TD corrected by SLM, waiting on fishing tools (finished circ for logs. POOH w/SLM & made 5' up hole correction. Ran Sonic & DIL logs OK. Start TIH w/4-arm caliper. Lost 1 caliper arm just below 7" csg seat [@ 12,600']. Waiting on fishing tools, will recover caliper arm or push it aside & run 5" production liner).

1/03/90

CTD \$1,816,990

Day 86

14,595', on TIH to cond mud & wellbore for 5" prod liner (PU fishing tools - 5.9" O.D. concave mill & junk basket on 3-1/2" drill string. Found caliper arm on btm, pushed it against btm of hole. POOH w/recovery being a few small pieces of the caliper arm. Will leave remaining junk in wellbore. POOH. PU 6" bit & 3 stabilizers & on TIH to wipe out wellbore & cond mud for 5" prod liner), 13.7/13.6# mud wt, 52 vis, 7.4 WL, no daily mud loss, cum mud loss 1037 bbls.

1/04/90

CTD \$1,826,379

Day 87

14,595' on TIH w/5" prod liner (finish TIH w/bit & stabilizers. Circ for liner. POOH. RU & PU 52 jts 5" 18# N-80 FL45 csg w/guide shoe. Comb float & landing collar & liner hanger. Start TIH w/5" liner on 3-1/2" DP-SLM 3-1/2" as it is picked up), 13.7/13.6# mud wt, 56 vis, 7 WL.

1/05/90

CTD \$1,901,947

Day 88

14,595 TD on POOH w/liner setting tools (finish TIH w/5" liner on 3-1/2" DP. PU circ manifold & circ out cond mud & wellbore. Hang liner 2' off btm. Liner btm @ 14,593' & top @ 12,453' [see prod liner details]. Cmt liner in place. Bump plug & start POOH.), 13.6/13.5# mud wt, 52 vis, 6.6 WL.

1/06/90

CTD \$1,908,543

Day 89

14,595' TD, on TIH w/6" bit & etc to dress off 5" liner top (finish POOH w/liner setting tools. WOC & etc. PU 6" bit, 7" csg scraper & etc & start TIH), 13.7/13.7# mud wt, 52 vis, 6.6 WL.

1/07/90

CTD \$1,915,127

Day 90

14,595' TD (14,530' PBTD), circ @ PBTD conditioning mud (finished in hole & washed to 5" liner top @ 12,453', 16' soft cmt on liner top & a few soft stringers above that. POOH. PU 4-1/8" bit, 5" csg scraper & DC. TIH w/2-7/8" & 3-1/2" DP wash from 14,237' to 378' & drill hrd cmt from 14,378-14,530'. Start conditioning mud), 13.6/13.6# mud wt, 52 vis, 6.8 WL.

1/08/90

CTD \$1,922,851

Day 91

14,595' TD (14,530' PBTD) on POOH w/RTTS following liner top testing (finish cond mud @ 14,530'. POOH. PU RTTS pkr & TIH to 12,418' & set same. Displace mud in 3-1/2" DP w/72 bbls f wtr. 1st hr had 5 bbls flow back, 2nd & 3rd hrs well was dead - 3004 psi flow back test good. Reversed out f wtr. Press tested liner top w/2000 psi, each time it would bleed to 1750 psi in 15 mins & press drop would stop. On last press up the 1750 psi was held for 30 mins. Press w/250 psi, leak is OK. Inj rate @ 2000 psi is nil, therefore, no sqz will be attempted. Now on POOH w/RTTS pkr), 13.6/13.6# mud wt, 54 vis, 7 WL.

1/09/90

\$1,933,026 Day 92 14,595' TD (14,530' PBTD) LD 3-1/2 / 2-7/8" drill strings (finished POOH w/RTTS. TIH w/4-1/8" bit on 2-7/8 / 3-1/2" drill string. Displace 13.6# mud

strings (finished POOH w/RTTS. TIH w/4-1/8" bit on 2-7/8 / 3-1/2" drill string. Displace 13.6# mud w/10.0# brine wtr. Stared LD drill string), 10.0# brine.

1/10/90

CTD \$2,000,577

Day 93

14,595', RD Schlumberger after running CBL/CET logs (finished LD 2-7/8" drill string. Install tbg spool & test w/3000 psi, OK. NU 6" 5000 psi BOP's. RU & run CBL/CET logs & start RD logging truck), 10.0# brine.

1/11/90

CTD \$2,146,553

Day 94

14,595' TD (14,530' PBTD) RDRT & start MORT (RU & run 65 jts [2018.92'] 2-7/8" 6.5# N-80 EUE tbg. Landed tbg in tbg spool. Install tbg flange), 10# brine in wellbore. The rig will move off of wellsite Jan 12 & 13. Location will be cleaned & pad built for completion unit. Well work will cease for evaluation of CBL/CET logs & for completion procedure. This is the final drill report. Rig was released @ 12:00 hrs (noon) on 1/11/90. FINAL REPORT PENDING COMPLETION.

PRODUCTION LINER (CASING) DETAILS

FOR <u>Hartman #2-31A3</u>

Ran <u>51</u> jts, (<u>2139.98</u> ft.), <u>5</u> " O.D., <u>18#</u> Wt., <u>N-80</u> Gr.
<u>FL45</u> / Conn. Set and cemented @ <u>14,593</u> ft. KB
Csg string wt. <u>183.075</u> # in <u>13.7</u> # gal mud & in air <u>231.564</u> #
Centralizers @ ran 50 (5-3/4 / 5-1/8) Turborlators on the middle at every
joint,
Cement Top Calculated to be @ 12,253 ft., in the intermediate casing.
Top Cement for Liner Job 227 Cubic Ft.
Used Caliper from <u>Sonic</u> Log.
Cement around liner in open hole 175.5 Cu. Ft. w/ 30 % Excess. Cement around liner in over lap 10.92 Cu. Ft. w/ 10 % Excess. Cement above liner top in casing 40.5 Cu. Ft.
Pre-flush: 24 bbls of Spacer 3000 @ 14.4 ppg . 12 bbls of CW2 chemical was @ 8.3 ppg .

hart-csg Page 1 of 2

PRODUCTION LINER (CASING) DETAILS

FOR Hartman #2-31A3

FROM B	OTTOM TO TOP	:				I <u>14,595</u> . FT.
					S	ECTION
JTS.	O.D.	WT.	GR.	CONN.	LENGTH	TOP @
_1	Float		Gu	ide-Shoe	1,55	14,591.45
_1	5"	18#	N-80	FL45	41.68	14,549,77
1 com	o landing &		Flo	at Collar	1.72	14,548.05
			Land	ing Collar		
50	5"	18#	N-80	FL45	2080.32	12,467.73
W. J. L.				X-OV	ER	
				LINER HANG	ER <u>9</u> . <u>13</u>	12,458,60
			T	IE BACK SLEE	VE <u>5.58</u>	12,453,02
CASIN CONNECT			- TORQUE	RANGE MAXIMUM		
FL45		_		3100		
		_				
Before	setting line			te drill str	ing & liner <u>35</u> 0	00 Ft. Lbs.
With li	iner hanger s	set:	Torque	to start rota	ating liner <u>35</u> 0	00 Ft. Lbs.
	Rotated line	er with	Torque ran	ging from	3500 to 400	00 Ft. Lbs.
REMARKS rotati	S: <u>Began to</u>			n cement at t	the shoe and con	tinued

hart-csg Page 2 of 2

WESTERN DIVISION DAILY DRILLING & COMPLETION REPORTS 3/05/90

1

Hartman #2-31A3
DEV - Duchesne County, Utah - Bluebell/Altamont Field
Sec 31, T1S, R3W - Pennzoil - PZL W.I. 42.329002% - PD 14,500' - AFE #
07096073 - AFE cost \$1,810,000

3/02/90	Completion CTD \$2,189,264 Cont running GST log.
3/03/90	CTD \$2,191,354 Cont running GST log.
3/04/90	CTD \$2,221,284 Finished running GST log. RD Schlumberger & SWI. Will drop from report pending analysis of logs and selection of perfs.

WESTERN DIVISION DAILY DRILLING & COMPLETION REPORTS 3/23/90 1

Hartman #2-31A3
DEV - Duchesne County, Utah - Bluebell/Altamont Field
Sec 31, T1S, R3W - Pennzoil - PZL W.I. 42.329002% - PD 14,500' - AFE #
07096073 - AFE cost \$1,810,000

Completion 3/22/90 CTD \$2,224,449

RESUMPTION OF COMPLETION
MIRU pulling unit. Found SICP to be 0 psi. PU 4-1/8"
mill, bumper sub, 15 3-1/8" drill collars, 63 jts of
2-7/8" Nuloc SCC tbg & 65 jts 2-7/8" 8rd tbg. SDFN.
Will cont PU tbg this AM. Plan to clean out to btm &
perf next week.

WESTERN DIVISION DAILY DRILLING & COMPLETION REPORTS 3/30/90 1

Hartman #2-31A3

DEV - Duchesne County, Utah - Bluebell/Altamont Field Sec 31, T1S, R3W - Pennzoil - PZL W.I. 42.329002% - PD 14,500' - AFE # 07096073 - AFE cost \$1,810,000

3/23/90	Completion CTD \$2,226,629 13 hr SICP 0 psi. PU 245 jts of 2-7/8" 8rd tbg & ran mill to 12,400'. SDFWE. Prep to clean out 5" liner to btm.
3/26/90	CTD \$2,229,344 61 hr SITP 0 psi, SICP 0 psi. Finished GIH w/2-7/8" tbg. Cleaned out cmt & mud from 14,410' to 14,530' & circ'd hole clean w/10 ppg brine wtr. POOH w/140 jts of 2-7/8" tbg & SDFN. Prep to finish POOH w/tbg, drill collars, bumper sub & mill.
3/27/90	CTD \$2,230,594 13 hr SITP 0 psi, SICP 0 psi. Finished POOH w/tbg, drill collars, bumper sub and mill. SDFN. Now waiting on perf'ing guns to be loaded.
3/28/90	CTD \$2,230,594 Well shut in. Waiting on perfing guns to be loaded.
3/29/90	CTD \$2,230,594 Well shut in. Waiting on perfing guns to be loaded.

WESTERN DIVISION DAILY DRILLING & COMPLETION REPORTS 4/06/90 1

Hartman #2-31A3

DEV - Duchesne County, Utah - Bluebell/Altamont Field Sec 31, T1S, R3W - Pennzoil - PZL W.I. 42.329002% - PD 14,500' - AFE # 07096073 - AFE cost \$1,810,000

Completion

3/30/90 CTD \$2,230,594

Well shut in. Waiting on perf'ing guns to be loaded. Will run guns 4-2-90.

4/02/90 CTD \$2,311,439

SICP O psi. RU Flopetrol & WIH w/tbg conveyed perf'ing system on 2-7/8" tbg. Ran GR-CCL correlation log to spot 3-1/8" guns & set 7" Johnston Posi-set pkr @ 12,320'. Landed tbg on hanger w/32,000# comp. Removed BOP & installed tree. Tested pack-off to 5000 psi, held OK. Swabbed fluid level in tbg down to 4000' & SDFN. Prep to drop bar & perf. Complete details later.

4/03/90 CTD \$2,389,509

Dropped bar down 2-7/8" tbg & perf'd w/3-1/8" guns (2 spf 120 deg phasing) as follows:

spf, 120 deg phasing) as follows:

12,818-12,830' 13,380-385' 13,712-722' 14,118-121'

12,838-12,842' 13,401-403' 13,738-746' 14,155-157'

12,880-12,890' 13,419-422' 13,764-776' 14,175-179'

12,994-13,005' 13,439-442' 13,804-807' 14,225-230'

13,084-13,096' 13,534-537' 13,812-817' 14,248-251'

13,160-13,162' 13,545-548' 13,846-856' 14,332-335'

13,175-13,179' 13,590-600' 13,882-884' 14,372-376'

13,222-13,228' 13,604-610' 13,902-912' 14,396-399'

13,237-13,242' 13,626-631' 13,937-942' 14,452-454'

13,259-13,284' 13,649-653' 14,001-005' 14,460-476'

13,309-13,320' 13,672-676' 14,025-035'

13,329-13,332' 13,690-694' 14,064-068'

Net ft of pay 285', total holes 570. All depths from Schlumberger Dual induction log run 1-2-90. Had wtr blanket to surf in 45 mins. Had oil to surf in 1 hr. Flowed well to frac tank and tank battery for 22 hrs on various ck sizes. Made total of 90 BO & 100 BW. Last hr made 26 BO & 1 BW on 17/64" ck w/FTP 1500 psi.

4/04/90

CTD \$2,391,534

Well flowed 615 BO & 29 BW in 23 hrs on 16/64" ck w/FTP 1250 psi. Last hr made 25 BO & 1/2 BW. Prep to set back press valve & run heat string.

4/05/90

CTD \$2,438,184

Set back press valve in 2-7/8" hanger. Removed tree & installed BOP. WIH w/213 jts 1.9" heat string (7010'). Landed tbg on split hanger. Removed BOP & installed tree. Tested pack-off to 5000 psi & csg to 1000 psi. Both held OK. Circ'd heat string w/fm wtr containing corrosion inhibitor & oxygen scavenger & connected downhole heat trace. Pulled back press valve, had 2500 psi SITP (9 hrs). Flowed well to tank battery for 13 hrs on 1/2" ck w/FTP 550 psi. Made a total of 366 BO & 31 BW. Last hr made 32 BO & 1-1/2BW. Will cont flow testing.

WESTERN DIVISION DAILY DRILLING & COMPLETION REPORTS 4/09/90 1

Hartman #2-31A3
DEV - Duchesne County, Utah - Bluebell/Altamont Field
Sec 31, T1S, R3W - Pennzoil - PZL W.I. 42.329002% - PD 14,500' - AFE #
07096073 - AFE cost \$1,810,000

	Completion	
4/06/90	CTD \$2,428,844	
	2-7/8" TBG DETAIL	
	KB correction	21.50'
	2-7/8" 8rd tbg subs (8.10 & 4.00')	12.10'
		2,285.85'
	Seating nipple (2.25" ID)	1.10'
	7" Johnston Posi-Test pkr	4.17′
	X-over	1.10'
	14 jts 2-3/8" 4.7# N-80 8rd tbg	438.75 ′
	RA marker connection w/x-overs above & below	2.32′
	Ported sub	.53′
	1 jt 2-3/8" 4.7# N-80 8rd tbg	31.58′
	2-3/8" 8rd sub	6.45′
	Firing head	.72′
	Safety spacer	12.83'
	3-3/8" HSC guns	1,658.00'
	Bull plug	1.70′
	-	
		.4,478.70′
	1.9" TBG DETAIL	01 504
	KB correction	21.50'
	213 jts 1.9" 2.76# N-80 10rd tbg	7,010.00'
		7,031.50'
	RD pulling unit. Will report production one	•
4/07/90	CTD \$2,428,844 Well flowed 692 BO & 48 BW in 24 hrs on 26/64 550 psi.	" ck w/FTP
4/08/90	CTD \$2,428,844 Well flowed 494 BO & 66 BW in 24 hrs on 18/64 700 psi. FINAL REPORT.	" ck w/FTP

PENNZOIL EXPLORATION AND PRODUCTION COMPANY

P. O. BOX 290 • NEOLA, UTAH 84053 • (801) 353 - 4397

May 7, 1990

John Baza

D.R. Lankford

State of Utah

Division of Oil, Gas, and Mining

3 Triad Center

Suite 350

Salt Lake City, Utah 84180-1203

MAY 08 1990 U

OIL GAS & MINING

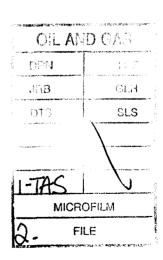
Dear John:

Find duplicate copies of WELL COMPLETION REPORTS for the Swykes 2-21A2,

and Miles 7-7B3.

Thanks,

D.R. Lankford



STATE OF UTAH DEPARTME OF NATURAL RESOURCES DIVISION OF OUR GAS AND MINING

SUBMIT	EN	TRIPLICA	re*
		structions o	rt
r	tver	se side)	

	DIVISION OF OIL, GAS, AND MINING						5. LEASE DESIGNATION AND SERIAL NO.		
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i.		7	· · · · · · · · · · · · · · · · · · ·		TECISION E	1	7. UNIT AGREEMENT NA	KS.	
WELL 2 NAME :	OF OPERATOR	OTHER			CAGO A				
		ORATION	AND PRODUCTIO	N COMPAN	0.000		8. FARM OR LEASE HAM HARTMAN	13	
	S OF OPERATOR				S JUL 3 0 1990		9. WELL NO.		
P.0	o. BOX 2967	, HOUS	TON, TX 77	252	DIVISION OF		2-31A3		
4. LOCATION See als		ort location	clearly and in accorda	ince with any	SOIL; SAB THINING		10. FIELD AND FOOL, OF	WILDCAT	
2437	7' FSL & 15	OS! FWT.					ALTAMONT 11. SEC., T., R., M., OB B	LE. AND	
	- 22 4 10						SURVEY OR ARMA		
							SEC 31 T1s R	3W	
14. PERMIT	NO.		15. BLEVATIONS (Sh	ow whether DI	, RT, GR. eta.)		12. COUNTY OR PARISH	18. STATE	
API 1	NO. 43-013	-31243-0	00 GL 6302	2.6			DUCHESNE	UTAH	
16.		Charle A	percentate Box To	Indicate N	lature of Notice, Repo		the Dete		
	You	CHOCK TY		marcare 1	divise of 140mcs, Repo		•		
	02	ICE OF INTE	ation to:			avasaqu:	ENT REPORT OF:		
	WATER SHUT-OFF	 	PULL OF ALTER CASING	٠ ــــــا	WATER SHUT-OFF	<u> </u>	REPAIRING W	TLL	
	URE TREAT		MULTIPLE COMPLETE	 	FRACTURE TREATME		ALTERING CA		
	OR ACIDIZE	 	ABANDON* CHANGE PLANS	 	SHOUTING OR ACIDIS	SING [A BANDON MEN	r•	
	r) TEMPORARI	LV SHUT		X	(Other) (Note: Repor	t_results	of multiple completion o	n Well	
7. DESCRIB	E PROPOSED OR CO	MPLETED OF	ERATIONS (Clearly stat	e all pertines	t details, and give pertine ions and measured and tr	nt dutes	tion Report and Log ford	of starting and	
	L PRODUCTIO	n opera		AS REPAII	NEAR NEOLA, UTAH.	O DFI JPE	AND GAS RJF GLH SLS	Œ	
SIGNED (This of	pace for Federal	or State off	ce use)	TITLE PET	PROLEUM ENGINEER	2-	FKE 7-26-9	0	
COMPT	OF APPR	OVAL, IF A	NY:	· - = 					

reverse	-101	c)
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5. LEASE DESIGNATION AND SERIAL NO.

CINEDOVAL	07/070	A W A LAND W C	6. IF INDIAN, ALLOTTER OR TRIME NAME
(Do not use this form for no	OTICES AND REPORTS opposals to drill or to deepen or old incation for Permit—" for such		
OIL X WELL OTHE		10)14(218.1197)	T. UNIT AGREEMBNT NAME
2. NAME OF OPERATOR			S FARM OR LEASE NAME
	and Production Company	OCT 05 1990	"K 9 # 4 .
P.O. Box 2967, Houston		The Participant Con-	9. WELL NO. 2-31A3
4. LOCATION OF WELL (Report location	n clearly and in accordance with any	DIVISION OF State requirements & Agranas	10. FIELD AND POOL, OR WILDCAT
At surface		Aur' aur a saileatht	Altamont
2437' FSL and 1505' F	rur		11. SEC., T., R., M., OR BLE, AND SURVEY OR ARMA
	. МП		Sec. 31, T1S-R3W
14. PERMIT NO.	15. BLEVATIONS (Show whether DE	r, RT, CR, etc.)	12. COUNTY OR PARISH 18. STATE
43-013-31243	6302.6' GR	·	Duchesne Utah
16. Check	Appropriate Box To Indicate N	lature of Notice, Report, or	Other Data
NOTICE OF IN	FENTION TO:	AUBRI	QUENT REPORT OF:
TEST WATER SHUT-OFF	PULL OR ALTER CASING	WATER SHUT-OFF	REPAIRING WELL
FRACTURE TREAT	MULTIPLE COMPLETE	FRACTURE TREATMENT	ALTERING CASING
SHOOT OR ACIDIZE	ABANDON®	SHOUTING ON ACIDIZING (Other) Completion	ABANDONMENT®
(Other)	CHANGE PLANS		ts of multiple completion on Well upletion Report and Log form.)
T. DESCRIBE PROPOSED OR COMPLETED Coproposed work. If well is direct	PERATIONS (Clearly state all pertinen	والمراجع والم والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراج	upletion Report and Log form.) s, including estimated date of starting any ical depths for all markers and zones perti-
nent to this work.) *		mong and measured and this Ast.	OIL AND GAS
ÇII	MMARY OF COMPLETION FRO	OM 3/01/00 +- 0/11/00	500
3/01 thru 3/04/90: R		JN 3/01/90 to 9/11/90	100
	to 14,530'.		NO.
	Wasatch from 12,818-14	4761 (2051 570 hala	31.3
	/818-14,467' with 40,00	•	18).
5/23/90: Ran product		o gailons 15% nci.	1-Dardt
•	er log to determine act	idiioh distribution	MICROFILM
6/18/90: Ran product	_	id job distribution.	2 FRE
•	erforated Wasatch from	12 /40 1/ /201 /2221	
	,460-14,476' with 120,0	•	, 990 notes).
	er log to determine act	•	
9/10/90: Ran product		ta job atstribacion.	
7/10/30: Kan product	ion logs.		
		J	ess Dulnig
	10	N	e 9 1a, Utah 9/12/90
3. I hereby certify that the foregoing	1/1/		
SIGNED ALM U. U	THILE Sur	pervising Engineer	DATE 10-1-90
(This space for Federal or State o	ffice use)		
APPROVED BY	TITLE		DATE
COMDITAL HS OF APPROVAL, IF	ANY:		· ·

STATE OF UTAH DIVISION OF OIL, GAS AND MINING WORKOVER AND COMPLETION RECORD

OPERATOR: PENNZUIL EXPLORATION COMPANY REP: TERRY HADLOCK
WELL NAME: HARTHEN #2-31A3 API NO: 43-013-31243
SECTION: 31 TWP: 15 RANGE: 3W COUNTY: DUCHESNE
TYPE OF WELL: OIL: YES GAS: WATER INJECTION:
STATUS PRIOR TO WORKOVER: POW
INSPECTOR: DENNIS INGRAH TIME: 2:40 PM DATE: 2/23/95
REASON FOR WORKOVER:
CHANGE OF LIFT SYSTEM: PUMP CHANGE: Y PARTED RODS:
CASING OR LINER REPAIR: ACIDIZE: RECOMPLETION:
TUBING CHANGE: WELLBORE CLEANOUT: WELL DEEPENED:
ENHANCED RECOVERY: THIEF ZONE: CHANGE ZONE:
ENVIRONMENTAL/DISPOSITION OF FLUIDS USED:
PIT: LINED N UNLINED N FRAC TANK N BOPE: Y H2S PRESENT: N
OPERATIONS AT THE TIME OF INSPECTION: TIH W/KILL STRING
REMARKS: OPERATOR JUST LAYED DOWN SUBMERSIBLE PUMP TO REPLACE; WILL ALSO
HAVE CABLE CHECKED OUT. THEY HAVE RUN KILL STRING INTO HOLE
UNTIL PUMP ARRIVES TOMMORW.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING

i nesive	NA PROPERTY.	Safement State State	77.77	
	EC		VE	
	JUL	. 31	1995	
				5. Lease De

SUNDRY NOTICES AND REPOR	TS ON WELLS		12	ase Disignation and Serial No.	
Do not use this form for proposals to drill or de	epen or reentry to a diffe	erenave controll GAS			
Use "APPLICATION FOR PERMI	T -" for such proposals		**************************************		
SUBMIT IN TR	RIPLICATE		7. If u	init or CA, Agreement Designation	
1. Type of Well					
X Oil Well Gas well Other			8. We	If Name and No.	_
2. Name of Operator				HARTMAN 2-31A3	
Pennzoil Exploration and Production Compa	ny			Well No.	_
3. Address and Telephone No.				43 013 31243	
	4053 (801)353	-4397		eld and Pool, or Exploratory Area	
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)				Altamont-Wasatch	
SWSW SEC. 31, T1S, R3W				ounty or Parish, State Duchesne, UT	
12 CHECK APPROPRIATE BOX(s) TO INDIC	CATE NATURE OF NOTICE	CE, REPORT, OR OTHER	DATA		
TYPE OF SUBMISSION		TYPE OF ACTION			_
X Notice of Intent	Abandonment			Change of Plans	
	Recompletion			New Construction	
Subsequent Report	Plugging Back		^	on-Routine Fracturing	
	Casing repair		v	Vater Shut-off	
Final Abandonment Notice	Altering Casing			Conversion to Injection	
	X Other Change	e of operator		Dispose Water	
			Co	lote: Report results of multiple completion on Well completion or Recompletion Report and Log form.)	
 Describe Proposed or Completed Operations (Clearly state all pertinent de drilled, give subsurface locations and measured and true vertical de 			work. If well is o	directically	
Pennzoil plans to turn over operatorship of s	uhiect well to Coastal Oi	il and Gae Corn, affactive	August 1	1005	
volumes in plants to tall over operatoremp or o	abject well to coustal of	and das corp. enective	August I	, 1990.	
4. I hereby certify that the foregoing is true and correct					
Signed Af Landbard	Title Operations	s Superintendent	<u>D</u>	ate 7/28/1995	
(This space of Federal or State office use.)		-			=
Approved by	Title		Da	nts	
Conditions of approval, if any:					

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING

to any matter within its juriediction.

Do not use this form for proposals to drill or deepen or reentry to a different reservoir. SuBMIT IN TRIPLICATE	SUNDRY NOTICES AND REPORT	RTS ON WELLS	5. Lease Designation and Serial No. FEE
SUBMIT IN TRIPLICATE 1. Type of Well	Oo not use this form for proposals to drill or d	leepen or reentry to a different reservoir.	
Address and Operator		TRIPLICATE	7. If unit or CA, Agreement Designation
Pennzoil Exploration and Production Company 3. Address and Telephone No. P.O. Box 290 Neola, Utah 8 4 0 5 3 (8 0 1) 3 5 3 - 4 3 9 7 4. Losson of Well (Footage, Seo., T. R. M., or Survey Description) SWSW SEC. 31, T1S, R3W 12 CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION X Notice of Intent Recompletion New Construction New Construction New Construction New Construction Non-Routine Fracturing Water Shut-off Casing repair Water Shut-off Altering Casing Conversion to Injection Dispose Water Non-Routine Fracturine in Make. Regard and proposed or Completed Operations (Clearly state all pertinent datas), and give pertinent datas, and give pertinent datas, and give pertinent to this work) Ammendment to Sundry dated 7/28/95 Pennzoil plans to turn over operatorship of subject well to ANR Production Co. effective August 1, 1995.			8. Well Name and No.
3. Address and Telephone No. P.O. Box 290 Neola, Utah 8 4 0 5 3 (8 0 1) 3 5 3 - 4 3 9 7 4. Location of Well (Footage, Seo., T., R., M., or Survey Description) SWSW SEC. 31, T1S, R3W 12 CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Abandonment Abandonment Recompletion New Construction New Construction New Construction Non-Routine Fracturing Casing repair Water Shut-off Casing repair Water Shut-off Casing repair Water Shut-off Usignose Wa	Name of Operator		HARTMAN 2-31A3
P.O. Box 290 Neola, Utah 8 4 0 5 3 (8 0 1) 3 5 3 - 4 3 9 7 4. Losstein of Well (Footage, Seo., T., R., M., or Survey Description) SWSW SEC. 31, T1S, R3W 12 CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent Abandonment Recompletion Plugging Back Non-Routine Fracturing Water Shut-off Casing repair Water Shut-off Carrier Casing Conversion to Injection Dispose Water 13. Describe Proposed or Completed Operations (Clinarly state all pertinent details, and give pertinent dates, including astimated date of starting any proposed work. If well is directically dilided, give subsurfaces locations and measured and true vertical depths for all markets and sones pertinent to this work). Ammendment to Sundry dated 7/28/95 Pennzoil plans to turn over operatorship of subject well to ANR Production Co. effective August 1, 1995.	Pennzoil Exploration and Production Comp	any	9. API Well No.
4. Location of Well (Footage, Sec., T., R. M., or Survey Description) SWSW SEC. 31, T1S, R3W 12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION New Construction New Construction New Construction Non-Routine Fracturing Water Shut-off Caeing repair Water Shut-off Conversion to Injection Subsequent Report Plugging Back Other Change of operator Non-Routine Fracturing Water Shut-off Conversion to Injection Sispose Water Non-Routine Fracturing Water Shut-off Conversion to Injection New Recompletion on Wald Completion on Management to Sundry dated 7/28/95 Pennzoil plans to turn over operatorship of subject well to ANR Production Co. effective August 1, 1995.		4050 (004) 050 4007	· · · · · · · · · · · · · · · · · · ·
SWSW SEC. 31, T1S, R3W 11. County or Parish, State Duchesne, UT 12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION X		(801) 353-4397	
TYPE OF SUBMISSION X			11. County or Parish, State
TYPE OF SUBMISSION X	CHECK APPROPRIATE BOX(s) TO IND	ICATE NATURE OF NOTICE, REPORT, OR OTHE	ER DATA
Recompletion New Construction Non-Routine Fracturing Water Shut-off Casing repair Water Shut-off Casing repair Water Shut-off Conversion to Injection Dispose Water Blost: Report results of matiple completion or Water Shut-off Dispose Water Blost: Report results of matiple completion or Blost: Report results o			
Subsequent Report Plugging Back Casing repair Water Shut-off Conversion to Injection Dispose Water Note: Report seeds of multiple completion on Well Completion or Plugging Back Non-Routine Fracturing Water Shut-off Conversion to Injection Dispose Water Note: Report seeds of multiple completion on Well Completion or Need Completed Operations (Clearly state all pertinent datas), and give pertinent datas, including estimated data of starting any proposed work. If well is discotionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work) Ammendment to Sundry dated 7/28/95 Pennzoil plans to turn over operatorship of subject well to ANR Production Co. effective August 1, 1995.	X Notice of Intent		
Final Abandonment Notice Casing repair		Recompletion	New Construction
Final Abandonment Notice Altering Casing Other Change of operator Dispose Water Note: Report results of multiple completion on Well Completion of Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work) Ammendment to Sundry dated 7/28/95 Pennzoil plans to turn over operatorship of subject well to ANR Production Co. effective August 1, 1995.	Subsequent Report	Plugging Back	Non-Routine Fracturing
The state of the s		Casing repair	Water Shut-off
Note: Report results of multiple completion on Well Completion or Recompletion on Report and Log form.) 13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directically drilled, give subsurface logations and measured and true vertical depths for all markers and zones pertinent to this work.) Ammendment to Sundry dated 7/28/95 Pennzoil plans to turn over operatorship of subject well to ANR Production Co. effective August 1, 1995.	Final Abandonment Notice	- Altering Casing	Conversion to Injection
13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work). Ammendment to Sundry dated 7/28/95 Pennzoil plans to turn over operatorship of subject well to ANR Production Co. effective August 1, 1995.		X Other Change of operator	- L
drilled, give subsurface locations and measured and true vertical depths for all merkers and zones pertinent to this work) Ammendment to Sundry dated 7/28/95 Pennzoil plans to turn over operatorship of subject well to ANR Production Co. effective August 1, 1995.			Completion or Recompletion Report and Log form.)
		subject well to ANR Production Co. effective A	ugust 1, 1995.
DIV. OF OIL, GAS & MINING		AUG 11 1995	
14. I hereby certify that the foregoing is frug and odused Signed Out	1//2/11/1/2	Title Sr. Petroleum Engineer	Date 8/8/1995
Noel W. Putscher			•
Noel W. Putscher (This space of Federal or State office use.)	(This space of Federal or State office use.)		•
		Title	Date

FORM 9

STATE OF UTAH DIVISION OF OIL, GAS AND MINING

	5 . Lease Designation and Serial Number: ${f Fee}$
SUNDRY NOTICES AND REPORTS O	N WELLS 6. If Indian, Allottee or Tribe Name: N/A
Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for suc	27/4
1. Type of Well: OIL $oxed{X}$ GAS OTHER:	8. Well Name and Number: Hartman #2-31A3
2. Name of Operator: ANR Production Company	9. API Well Number: 43-013-31243
3. Address and Telephone Number: P.O. Box 749, Denver, CO 80201-0749	(303) 573 – 4455 10. Field and Pool, or Wildcat: Altamont
4. Location of Well	
Footages:	County: Duchesne
QQ, Sec., T., R., M.: SWSW Section 31-T1S-R3W	Stale: Utah
11. CHECK APPROPRIATE BOXES TO INDICATE	E NATURE OF NOTICE, REPORT, OR OTHER DATA
NOTICE OF INTENT (Submit In Duplicate)	SUBSEQUENT REPORT (Submit Original Form Only)
Abandon	Abandon * New Construction Repair Casing Pull or Alter Casing Change of Plans Perforate Convert to Injection Vent or Flare Fracture Treat or Acidize Water Shut-Off Other Change of Operator Date of work completion Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form. * Must be accompanied by a cement verification report.
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and giverical depths for all markers and zones pertinent to this work.) Pennzoil Exploration & Production Company sold all of their is Production Company effective August 1, 1995.	
13. Name & Signature: Ahila Boremen	Sheila Bremer Title: Environmental & Safety Analyst Date: 11/02/95

(This space for State use only)

OPERATOR CHANGE	<i>3</i>			Routing:
	tion received by the division item when completed. Write N/		able.	1-LEC 7-PL 2-LW 8-SJ 3-DPS/59-FILE 4-VLC
☑ Change of Opera ☑ Designation of		□ Designation of □ Operator Name (5-RJF 6-LWP
The operator of t	che well(s) listed below	has changed (EFFEC	TIVE DATE: 8-1-95)
•	ANR PRODUCTION COMPANY PO BOX 749 DENVER CO 80201-0749 phone (303) 572-1121 account no. N 0675	INC FROM (former	operator) PENNZOIL CO (address) PO BOX 2967 HOUSTON TX phone (713 account no.	28TH FL 77252-2967) 546-8104
Hell(s) (attach addi	itional page if needed):	*CA'S		
Name: HANSON TRUS Name: DASTRUP 2-30 Name: HARTMAN 2-3 Name: HANSON TRUS Name *UTE TRIBAL	T 2-5B3 API: 43-013- 0A3 API: 43-013- 1A3 API: 43-013- 1A3 API: 43-013- 1C-13A4/GR API: 43-013- 3A4/GR-WS API: 43-013-	30093 Entity: 5725 31079 Entity: 1636 31320 Entity: 11253 31243 Entity: 11026 31072 Entity: 1641 30301 Entity: 5925 30375 Entity: 5675	Sec <u> 5 Twp2s Rng 3W</u> L Sec 30 Twp1s Rng 3W L	ease Type:FEE ease Type:FEE ease Type:FEE ease Type:FEE ease Type:INDIA
DPERATOR CHANGE DO	CUMENTATION		entrigit den sem gest den de	
oherator (A	-8-10) Sundry or other Attach to this form). (fa	-12 8-11-95)		
Lc 2. (Rule R615- (Attach to	-8-10) Sundry or other $\frac{1}{16}$ this form). (feed 11-2-95)	egal documentation	has been received fro	om <u>new</u> operator
7. The Department operating a yes, show continuous c	ent of Commerce has bee uny wells in Utah. Is ompany file number:	n contacted if the company registered	new operator above is with the state? (yes	not currently /no) If
4. (For Indian (attach Tel comments se changes show	n and Federal Hells ONI lephone Documentation Fection of this form. Muld take place prior to	LY) The BLM has be Form to this report lanagement review of completion of step	een contacted regarding rt). Make note of of Federal and Indian s 5 through 9 below.	ng this change BLM status in well operator
1.3000 0000	· (11-1-10)			for each well
	has been updated for ea			
رد7. Well file la	abels have been updated	for each well liste	ed above. (11-20-95)	
22 8. Changes have for distribu	e been included on the ution to State Lands and	monthly "Operator, the Tax Commission	Address, and Account 1. (11-2-95)	Changes" memo
29. A folder has placed there	s been set up for the O e for reference during r	perator Change file outing and processi	e, and a copy of this ing of the original do	page has been cuments.

OPERATOR CHANGE WORKSHEET (CONTINUED) Initial each item when completed. Write N/A if item is not applicable.
ENTITY REVIEW
Lel. (Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Were entity changes made? (yes/no) (If entity assignments were changed, attach copies of Form 6, Entity Action Form).
N/A 2. State Lands and the Tax Commission have been notified through normal procedures centity changes.
BOND VERIFICATION (Fee wells only) Sondy # 116553821/80,000 "United facific Ins. C."
BOND VERIFICATION (Fee wells only) Singly # 116-53821/80,000 "United facific Ins.Co." 1. (Rule R615-3-1) The new operator of any fee lease well listed above has furnished proper bond.
2. A copy of this form has been placed in the new and former operators' bond files.
Today's date 19 <u>95</u> . If yes, division response was made by lette dated 19
LEASE INTEREST OWNER NOTIFICATION RESPONSIBILITY
(Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated
$\frac{N/A}{2}$. Copies of documents have been sent to State Lands for changes involving State leases.
FILMING
1. All attachments to this form have been microfilmed. Date: November 30 1995.
FILING
1. Copies of all attachments to this form have been filed in each well file.
2. The <u>original</u> of this form and the <u>original</u> attachments have been filed in the Operator Change file.
COMMENTS
95/003 BIA aprv. C.A. wells 9-29-95.

WE71/34-35

TATE OF UTAH
DIVISION OIL, GAS AND MINING

		5. Lease Designation and Serial Number: See Attached
SUNDRY NOTICES AND REPORTS C		6. If Indian, Allottee or Tribe Name: See Attached
Do not use this form for proposals to drill new wells, deepen existing wells, or to reente Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for su		7. Unit Agreement Name: See Attached
Type of Well: OIL X GAS OTHER: 2. Name of Operator:		8. Well Name and Number: See Attached
Coastal Oil & Gas Corporation		9. API Well Number: See Attached
Address and Telephone Number: P.O. Box 749, Denver, CO 80201-0749 Location of Well	(303) 573 – 4455	10. Field and Pool, or Wildcat: See Attached
Footages: See Attached QQ, Sec., T., R., M.: See Attached		County: See Attached State: Utah
11. CHECK APPROPRIATE BOXES TO INDICATE	E NATURE OF NOTICE, REP	ORT, OR OTHER DATA
NOTICE OF INTENT (Submit In Duplicate)		ENT REPORT ginal Form Only)
Abandon	Abandon * Repair Casing Change of Plans Convert to Injection Fracture Treat or Acidize X Other Change of Operator	New Construction Pull or Alter Casing Perforate Vent or Flare Water Shut-Off
Other	Date of work completion	
Approximate date work will start	Report results of Multiple Completions an COMPLETION OR RECOMPLETION REPORT * Must be accompanied by a cement verificate.	
 DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give vertical depths for all markers and zones pertinent to this work.) 	pertinent dates. If well is directionally drilled, give	subsurface locations and measured and true
Please be advised that effective December 27, 1995, ANR Prod assumed operations for the subject wells (see attached). Bond provided by Coastal Oil & Gas Corporation under the following #U605382-9, and BIA Nationwide Bond #11-40-66A. Coast under the terms and conditions of the leases for the operations	coverage pursuant to 43 CFR 31 g bonds: State of Utah #102103 stal Oil & Gas Corporation, as o	04 for lease activities is being
Bonnie Carson, Sr. Environmental & Safety Analyst ANR Production Company		MAR _ 8 1996 COIL, GAS & MINING
13. Name & Signature: Sheila Boreney	Sheila Bremer Environmental & S Title: Coastal Oil & Gas (afety Analyst
his space for State use only)		

			If Indian,		LOCATION	OF WELL		T
		Lease Designation	Allottee or			Section, Township		
Well Name & No.	API No.	& Serial Number	Tribe Name	CA No.	Footages	& Range	Field	County
Brotherson 1-33A4	43-013-30272	Detented 1/00	N1/A					
Brotherson 2-10B4	43-013-30272	Patented 1/80	N/A	N/A	820' FNL & 660' FEL	NENE, 33-1S-4W	Altamont	Duchesne
Brotherson 2-14B4	43-013-30815	Patented 1615	N/A	N/A	1241' FSL & 1364' FWL	SESW, 10-2S-4W	Altamont	Duchesne
Brotherson 2-15B4		Fee 0450	N/A	N/A	2557' FSL & 1642' FWL	NESW, 14-2S-4W	Altamont	Duchesne
Brotherson 2-22B4	43-013-31103 43-013-31086	Fee 1771	N/A	N/A	996' FWL & 1069' FSL	SWSW, 15-2S-4W	Altamont	Duchesne
Brotherson 2-2B5		Fee 1782	N/A	N/A	1616' FWL & 1533' FSL	NESW, 22-2S-4W	Altamont	Duchesne
Christensen 2-29A4	43-013-31302 43-013-31303	Fee //342	N/A	N/A	1034' FSL & 2464' FEL	SWSE, 2-2S-5W	Altamont	Duchesne
Crook 1-6B4		Fee //235	N/A	N/A	1425' FSL & 2131' FEL	NWSE, 29-1S-4W	Altamont	Duchesne
	43-013-30213	Patented 1825	N/A	N/A	2485' FNL & 1203' FEL	SENE, 6-2S-4W	Altamont	Duchesne
Dastrup 2-30A3	43-013-31320	Fee 1/253	N/A	N/A	1250' FSL & 1229' FWL	SWSW, 30-1S-3W	Altamont	Duchesne
Doyle 1-10B3 Duncan 2-9B5	43-013-30187	Patented 8 b	N/A	N/A	2382' FNL & 2157' FWL	SENW, 10-2S3W	Bluebell	Duchesne
	43-013-30719	Fee 24/0	N/A	N/A	1701' FWL & 1554' FSL	NESW, 9-2S-5W	Altamont	Duchesne
Ehrich 3-11B5 Elder 1-13B2	43-013-31080	Fee [/9]	N/A	N/A	1654' FSL & 1754' FWL	NESW, 11-2S-5W	Altamont	Duchesne
	43-013-30366	Patented 1905	N/A	N/A	1490' FNL & 1334' FEL	SWNE, 13-2S-2W	Bluebell	Duchesne
Ellsworth 1-17B4	43-013-30126	Patented 1695	N/A	N/A	763' FNL & 1189' FEL	NENE, 17-2S-4W	Altamont	Duchesne
Ellsworth 1-19B4	43-013-30183	Patented 1760	N/A	N/A	2043' FNL & 1764' FEL	SWNE, 19-2S-4W	Altamont	Duchesne
Ellsworth 1-20B4	43-013-30351	Patented 1900	N/A	N/A	1744' FNL & 1342' FEL	SWNE, 20-2S-4W	Altamont	Duchesne
Ellsworth 1-8B4	43-013-30112	Fee [655]	N/A	N/A	1755' FNL & 2377' FEL	SWNE, 8-2S-4W	Altamont	Duchesne
Ellsworth 2-17B4	43-013-31089	Fee 1696	N/A	N/A	1355' FWL & 1362' FSL	NESW, 17-2S-4W	Altamont	Duchesne
Ellsworth 2-19B4	43-013-31105	Fee 176	N/A	N/A	1402' FSL & 1810' FWL	NESW, 19 -2S-4W	Altamont	Duchesne
Ellsworth 2-20B4	43-013-31090	Fee 1902	N/A	N/A	677' FWL & 1611' FSL	NWSW, 20-2S-4W	Altamont	Duchesne
Ellsworth 3-20B4 Farnsworth 1-12B5	43-013-31389	Fee 11488	N/A	N/A	1500' FNL & 1203' FWL	SWNW, 20-2S-4W	Altamont	Duchesne
	43-013-31024	30/24 Patented 1645	N/A	N/A	2479' FNL & 1503' FEL	SWNE, 12-2S-5W	Altamont	Duchesne
Farnsworth 1-13B5	43-013-30092	Patented 1610	N/A	N/A	670' FNL & 1520' FEL	NWNE, 13-2S-5W	Altamont	Duchesne
Farnsworth 1-7B4 Farnsworth 2-12B5	43-013-30097	Patented 600	N/A	N/A	1923' FNL & 1095' FEL	SENE, 7-2S-4W	Altamont	Duchesne
	43-013-31115	Fee 1646	N/A	N/A	993' FSL & 768' FWL	SWSW, 12-2S-5W	Altamont	Duchesne
Farnsworth 2-7B4	43-013-30470	Patented 1935	N/A	N/A	1292' FSL & 1500' FWL	SESW, 7-2S-4W	Altamont	Duchesne
Fieldstead 2-28A4	43-013-31293	Fee ///7/7	N/A	N/A	2431' FSL & 2212' FWL	NESW, 28-1S-4W	Altamont	Duchesne
Galloway 1-18B1	43-013-30575	Fee 2365	N/A	N/A	1519' FNL & 1565' FEL	SWNE, 18-2S-1W	Bluebell	Duchesne
Hanskutt 2-23B5	43-013-30917	Fee 9400	N/A	N/A	951' FSL & 761' FWL	SWSW, 23-2S-5W	Altamont	Duchesne
Hanson 1-24B3	43-013-30629	Fee 2370	N/A	N/A	1354' FNL & 1540' FWL	NENW, 24-2S-3W	Bluebell	Duchesne
Hanson 2-9B3	43-013-31136	Fee 10455	N/A	N/A	1461' FWL & 1531' FSL	NESW, 9-2S-3W	Altamont	Duchesne
Hanson Trust 1-32A3	43-013-30141	Patented 640	N/A	N/A	671' FNL & 1710' FEL	NWNE, 32-1S-3W	Altamont	Duchesne
Hanson Trust 1-5B3	43-013-30109	Patented 1635	N/A	N/A	1200' FNL & 1140' FWL	NENE, 5-2S-3W	Altamont	Duchesne
Hanson Trust 2-29A3	43-013-31043	Fee 10205	N/A	N/A	1857' FWL & 1394' FSL	NESW, 29-1S-3W	Altamont	Duchesne
Hanson Trust 2-32A3 Hanson Trust 2-5B3	43-013-31072	Fee 1641	N/A	N/A	1141' FWL & 1602' FSL	NWSW, 32-1S-3W	Altamont	Duchesne
Hartman 1-31A3	43-013-31079	Fee 1636	N/A	N/A	1606' FSL & 1482' FWL	NESW, 5-2S-3W	Altamont	Duchesne
	43-013-30093	Fee 5725	N/A	N/A	1019' FNL & 1024' FEL	NENE, 31-1S-3W	Altamont	Duchesne
Hartman 2-31A3	43-013-31243	Fee 1/02/ ₆	N/A	N/A	2437' FSL & 1505' FWL	SWSW, 31-1S-3W	Altamont	Duchesne
Hunt 1-21B4	43-013-30214	Patented /840	N/A	N/A	1701' FNL & 782' FEL	SENE, 21-2S-4W	Altamont	Duchesne
Hunt 2-21B4	43-013-31114	Fee /839 Fee //982	N/A	N/A	1512' FWL & 664' FSL	NESW, 21-2S-4W		Duchesne
lorg 2-10B3	43-013-31388	Fee //482	N/A	N/A	738' FNL & 660' FEL	NENE, 10-2S-3W		Duchesne
Lake Fork 3-15B4	43-013-31358	Fee //378	N/A	N/A	1300' FNL & 1450' FWL	NENW, 15-2S-4W		Duchesne
Lawrence 1-30B4	43-013-30220	Fee [845 Fee [90]	N/A	N/A	919' FNL & 1622' FEL	NWNE, 30-2S-4W		Duchesne
Lawson 1-28A1	43-013-30358	Fee /90/	N/A	N/A	2275' FSL & 1802' FEL	NWSE, 28-1S-1W	Bluebell	Duchesne
Lazy K 2-14B3	43-013-31354	Fee 1/452	N/A	N/A	1670' FSL & 1488' FEL	NWSE, 14-2S-3W	Bluebell	Duchesne
Lindsay 2-33A4	43-013-31141	Fee 10457	N/A	N/A	1499' FWL & 663' FSL	SESW, 33-1S-4W		Duchesne
Lotridge Gates 1-3B3	43-013-30117	Patented /670	N/A	N/A	965' FNL & 750' FEL	NENE, 3-2S-3W		Duchesne
Matthews 2-13B2	43-013-31357	Fee //374 Fee //489	N/A	N/A	858' FNL & 1098' FWL	NWNW, 13-2S-2W	Bluebell	Duchesne
Meeks 3-8B3	43-013-31377	Fee 1/489	N/A_	N/A	1065' FNL & 1124' FWL	NWNW, 8-2S-3W	Altamont	Duchesne

	ion of Oil, Gas and Mining ATOR CHANGE WORKSHEET				Routing: 64
Attac Initi	h all documentation received by the division al each listed item when completed. Write N//	regarding this change. A if item is not applic	cable.		2 DTS 8-FILE
Ch De	ange of Operator (well sold) signation of Operator	□ Designation of □ Operator Name		/ 	4 Poly 6 - FILM
The d	operator of the well(s) listed below	has changed (EFFE	CTIVE DATE:	12-27-95)
TO (1	new operator) COASTAL OIL & GAS CORP (address) PO BOX 749 DENVER CO 80201-0749	FROM (forme)		PO BOX 749	TON CO INC 80201-0749
	phone <u>(303)572-1121</u> account no. <u>N 0230 (B)</u>			phone (303 account no.	
He11(S) (attach additional page if needed):				
Name Name Name Name	: **SEE ATTACHED** API: API: API: API: API: API: API: API:	Entity: Entity: Entity: Entity: Entity: Entity:	SecTwp SecTwp SecTwp SecTwp SecTwp	Rng Le Rng Le Rng Le Rng Le Rng Le	ease Type:
Lec 1	TOR CHANGE DOCUMENTATION . (Rule R615-8-10) Sundry or other operator (Attach to this form). (Lec.) . (Rule R615-8-10) Sundry or other 1 (Attach to this form). (Lec.)	d 3-8-96/ eqal documentation			
	The Department of Commerce has been operating any wells in Utah. Is yes, show company file number:		a with the	state: (yes	/110/ 11
	(For Indian and Federal Hells ONL (attach Telephone Documentation F comments section of this form. M changes should take place prior to	lanagement review o	of Federal	and Indian	well operator
<u>lec</u> 5.	Changes should take place prior to Changes have been entered in the Otlisted above. (3-11-96)(4-3-96/Indian)(4-1) Cardex file has been updated for ea	il and Gas_Informa 5-96/Fcc C.A.'s) (8-20-9.	tion System	(Wang/IBM)	for each well
Lec 6.	Cardex file has been updated for ea	ch well listed abo	ve.		
4C7.	Well file labels have been updated	for each well list	ed above.		
uc 8.	Changes have been included on the for distribution to State Lands and	monthly "Operator, the Tax Commissio	Address, an. (3-11-96)	and Account	Changes" memo
<u>ec</u> 9.	A folder has been set up for the Oplaced there for reference during re	perator Change fil outing and process	e, and a co	opy of this original doc	page has been uments.

OPERATOR	CHANGE WORKSHEET (CONTINUED) Initial each item when completed. Write N/A if item is not applicable.
ENTITY	REVIEH
<u>Jec</u> 1.	(Rule R615-8-7) Entity assignments have been reviewed for all wells listed above. Wer entity changes made? (yes/no) (If entity assignments were changed, attach <u>copies</u> o Form 6, Entity Action Form).
N/A 2.	State Lands and the Tax Commission have been notified through normal procedures o entity changes.
BOND VE	ERIFICATION (Fee wells only) Surely No. Ulo5382-1 (480,000) United Pacific Ins. Co.
Lec 1.	(Rule R615-3-1) The new operator of any fee lease well listed above has furnished approper bond
8	A copy of this form has been placed in the new and former operators' bond files.
<u>Lec</u> 3.	The former operator has requested a release of liability from their bond (yes (no) Today's date <u>march II,</u> 19 <u>96</u> . If yes, division response was made by letter dated 19 (Same Bond AS Coastel)
LEASE I	NTEREST OHNER NOTIFICATION RESPONSIBILITY
	(Rule R615-2-10) The former operator/lessee of any fee lease well listed above has been notified by letter dated
2.	Copies of documents have been sent to State Lands for changes involving State leases.
FILMING	
W 1.	All attachments to this form have been microfilmed. Date: $1-7$ 1997.
FILING	
1. <u>(</u>	Copies of all attachments to this form have been filed in each well file.
2.]	The <u>original</u> of this form and the <u>original</u> attachments have been filed in the Operator Change file.
COMMENTS	
	This change involves Fee lease Inon C.A. wells only & State lease wells. C.A. & Indian lease wells will be handled on separate change.
	BLm /SL Aprv. C.A.'s 4-11-96.
	00 BIA apri. CA's 8-16-96.
	9 BIA apri. Indian Lease wells 3-26-96.
WE/1/34-	35 * 96/107 Lemicy 2-582/43-013-30784 under Nevter at this time; no chy. yet!

Name & Signature

(This space for State use

Sheila Bremer

Title: Environmental & Safety Analyst Date:

3/27/96

03/22/96

PROCEDURE

NOTE: USE ONLY CLEAN FRESH WATER. DO NOT USE PRODUCE WATER FORM ANY SOURCE DURING THIS WORKOVER.

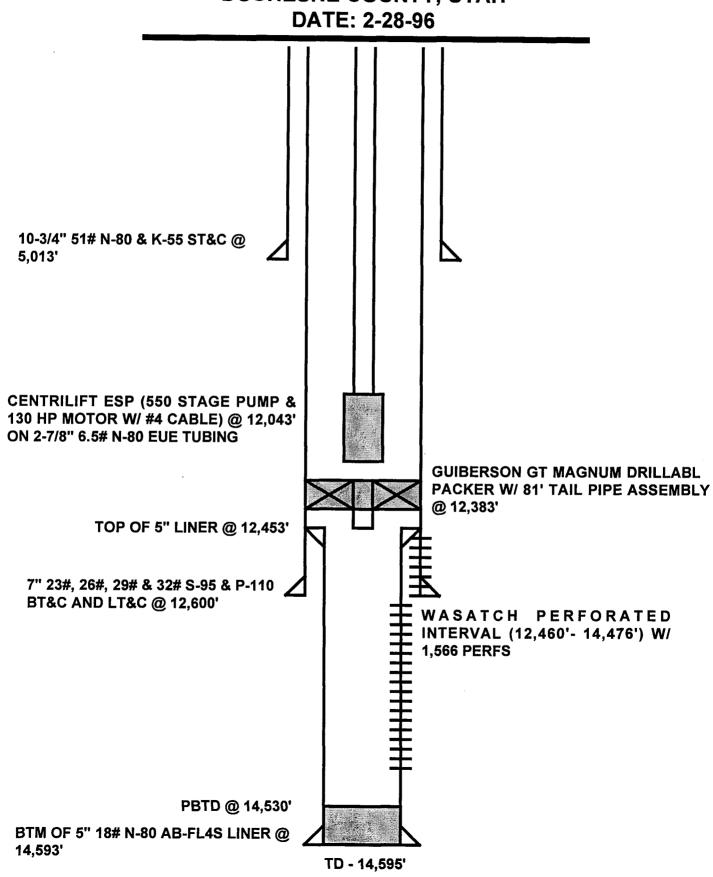
- 1. MIRU completion rig. MIRU slickline company. Retrieve collar stop @ 9,700' and knock out drain w/ sinker bars @ 11,906'. ND wellhead & NU BOPE. MIRU spooler and TOH w/ ESP @ 12,012. NOTES: Pay special attention to cable while POH for drag marks and denote depth. Send ESP to Centrilift in Caspear, Wyoming for pit test.
- 2. TIH w/ 6" drag bit and casing scraper (7" 32# casing) to clean out 7" casing down to 5" liner top @ 12,453'. TOH w/ BHA.
- 3. TIH w/ a packer plucker milling tool on tubing and mill out 7" #32 Guiberson packer @ 12,383' (see tail pipe schematic). Consider milling out packer w/ washover shoe and washpipe as last resort. POH w/ packer BHA.
- 4. TIH w/ 4-1/8" drag bit, casing scraper (5" 18# casing), 2-3/8" and 2-7/8" tubing to clean out 5" casing from 12,453' to PBTD @ 14,530'. TOH w/ BHA.
- 5. TIH w/ 5" retrievable packer, **930' of 2-7/8" 6.5# P-110 tubing** and **12,180' of 3-1/2" 9.3 # P-110 tubing**. Set packer @ +/- 13,110'. Nearest perfs @ 13,096' and 13,160'.
- 6. MIRU Dowell and acid stimulate **Wasatch intervals (13,160' to 14,476')** total of 1,215 holes as shown below. **Heat all fluids to 150 F except bleach**. **Inject down the annulus while pumping down tubing to maintain a hydrostatic column.**

Fluid Description	Volume (Gals)	Volume (Bbl's)	Special Additives	Diverters	Rate (BPM)	Maximum Surface Pressure
Pad	4,200	100	Scale Inhibitor		20-30	9,000 psig
15% HCL Acid	4,000	95	Scale Inhibitor & Micellar Solvent	600 BS 1.1 S.G.	20-30	9,000 psig
Gelled Water	1,000	24			20-30	9,000 psig
Bleach	1,000	24			20-30	9,000 psig
Gelled Water	1,000	24		_	20-30	9,000 psig
15% HCL Acid	4,000	95	Scale Inhibitor & Micellar Solvent	600 BS 1.1 S.G.	20-30	9,000 psig
Gelled Water	1,000	24		0.5 ppg RS 0.5 ppg BAF	20-30	9,000 psig
Bleach	1,000	24			20-30	9,000 psig
Gelled Water	1,000	24			20-30	9,000 psig
15% HCL Acid	4,000	95	Scale Inhibitor & Micellar Solvent	600 BS 1.1 S.G.	20-30	9,000 psig
Flush (Btm Perf)	5,700	136			20-30	9,000 psig
Totals	23,700	565				

HARTMAN #2-31A3 WORK R PROCEDURE

- 7. RU swab equipment and swab back acid job until pH is above 7. **Do not place the ESP in hole with a low pH.** Monitor well flow back as required.
- 8. Release 5" packer and TOH w/ 3-1/2" & 2-7/8" tubing strings.
- 9. TIH w/ ESP, 2-7/8" tubing and cable (consult Denver with ESP design based on results). Place well on production.

HARTMAN #2-31A3 WELLBORE SCHEMATIC SECTION 31 T1S R3W DUCHESNE COUNTY, UTAH





PACKER INSTALLATION PLAN

ſ		PREP	ARED FOR		СОМІ	PANY		DATE		
		J	ess dulln	IG	PEN	NNZOIL 5/17/90				
ļ	20.05 K.B.	LEAS		WELL No.	FIELD	CO./PARISH	STATE			
		HAR'	IMEN	2-31A3	ALIMONT BLUEBELL	DIJCHESNE	UT	回 NEW COMPLETION		TION
١	INSTALLATION	ITEM	LENGTH	FROM	то	DE	SCRIPTION		OD	QI
						7" 32# CASING		7.00	6.094	
		1.	3.36	12383.00	12386.36		7" x 4.00 MACNUM GT DRILLABLE PKR 10,000 DIFFIRENTIAL		5.67	4.00
										-
	X X	2.	4.75	12386.36	12391.11	5' MILL OUT	EXTENSION		5.00	4.276
١		3.	.5 5	12391.11	12391.66	CROSS OVER	5" LCT BOX	TO 3½"	5.67	2.88
١		4.	1.06	12391.66	12392.72	CROSS OVER	3½ EUE 8rd	BOX TO		l
								4.50	2.93	
		5.	33.90	12392.72	12426.62	1-jt 3½ HD 1	LOCK IT		4.50	2.992
l		6.	1.39	12426.62	12428.01	2.75 BAKER	'F' NIPPLE			
						WUTH COL			4.278	2.75
	52	7.	34.26	1247.01	12462.27	1-jt 3½ HD 1	LOCK IT		4.50	2.992
		8.	1.59	12462-27	12463.86	2.75 HAKER			4.73	2.69
				12818.00	14760.00	PERFS				
	T								<u> </u>	
						TUBING & LAT				
1	GENERAL REMARKS	5" 1	8# LINFP	TOP 0 1245	31	PACKER TY		VING MET		
	LATCH SET WI					top LATCH	sligi	t tens	ion-ro	
1	COMP. FLUID TYPE A			MATED BHT	ESTIMATED BHP	middle	right	8-12	turns	
L	MAX. ANGLE AND KIC			SAND CON		MAGIJUM GT		DRILL		ERATIC
ľ			DESTROM		AREA VERNU	L UT	DELIVE	17620E	ı NO.	

STATE OF THE

FORM 9

ATE OF UTAH DIVISION OF OIL, GAS AND MINING

1996-05	10:37	#161 P.02/09
	5. Lease Designation Fee	and Sarial Number;

		Fee
SUNDRY NOTICES AND REPORTS O	N WELLS	6. If Indian, Allottes or Tribe Name:
Do not use this torm for proposals to drill new wells, deepen existing walls, or to reenter	plugged and abendoned wells,	7. Unit Agraement Name: N/A
Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for suc	h proposals,	
Type of Wall: OIL X GAS OTHER:		8. Well Name and Number: Hartman #2-31A3
2. Name of Operator: Coastal Oil & Gas Corporation		8, API Wall Number: 43-013-31243
3. Address and Telephone Number: P.O. Box 749, Denver, CO 80201-0749	(303) 573 – 4455	10. Field and Pool, or Wildcat: Altamont
4. Location of Well Footages: 2437' FSL & 1505' FWL QQ, 5ec., T., R., M.: SWSW Section 31—T1S—R3W	E NATURE OF NOTICE RE	county: Duchesne state: Utah
11. CHECK APPROPRIATE BOXES TO INDICAT	T	
NOTICE OF INTENT		QUENT REPORT Original Form Only)
Abandon New Construction Repair Casing Pull or Alter Casing X Change of Plans X Recompletion Convert to Injection Perforate Fracture Treat or Acidize Vent or Flare Multiple Completion Water Shut-Off Other Approximate date work will start Immediately	Abandon * Repair Casing Change of Plans Convert to Injection Fracture Treat or Acidize Other Date of work completion Report results of Multiple Completion COMPLETION OR RECOMPLETION RE	New Construction Pull or Alter Casing Perforate Vent or Flare Water Shut—Off seand Recompletions to different reservoirs on WELL EPORT AND LOG form.
DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly sinter all portinent details, and giverical depths for all markets and zones pertinent to this work) Please see the attached workover procedure for work to be penecessitated by downhole problems encountered during work wellbore, acidize the lower Wasatch perfs, and repair an elect	erformed in the subject well. A	. change in the scope of work was ntent (dated 3/22/96) to clean out the
13. Name & Signature: Aprilla Farence V (The record of State use only)	Sheila Bremer Yills; Environmenta	l & Safety Analyst Date: 05/06/96
(This space for State use any). The hours of	leum Ergne	en 5/1/96

(See Instructions on Reverse Side)

1996,25-06

PROCEDURE

NOTE: USE ONLY CLEAN FRESH WATER, DO NOT USE PRODUCE WATER FORM ANY SOURCE DURING THIS WORKOVER.

- MIRU wireline company. Wireline set cement retainer @ 12,980'. 1,
- MIRU Halliburton and pump 100 sx premium cement below cement retainer. 2.
- MIRU Oil Well Perforators(OWP) and RU 5,000 psig lubricator. Perforate new upper Wasatch 3. footages (11,356' through 12,443') and reperforate old intervals and add infill perfs (12,468' through 12,966') as shown on the attachment from Steve Laney. Perforate using 4" and 3-1/8" casing guns with 3 SPF @ 120 degree phasing. Total of 102 zones and 306 perforations. Selected footages correlate to Schlumberger CBL dated 1-10-90(Run #1).
- TiH w/ 7" 29# retrievable packer on 3-1/2" 9.3 # P-110 tubing. Set packer @ +/- 11,200'. 4.
- MIRU Dowell and acid stimulate Wasatch intervals (11,356' to 12,966') as shown below w/ 9,000 5. gals of 15% HCL acid. Heat all fluids to 150 F. Load backside annulus while pumping down tubing to maintain a hydrostatic column.

Fluid Description	Volume (Gals)	Volume (Bbl's)	Special Additives	Diverters	Rate (BPM)	Maximum Surface Pressure
Pad	4,200	100	Scale Inhibitor		20-30	9,000 psig
15% HCL Acid	3,000	71	Scale Inhibitor & Micellar Solvent	150 BS 1.1 S.G.	20-30	9,000 psig
Gelied Water	1,000	24			20-30	9,000 psig
15% HCL Acid	3,000	71	Scale Inhibitor & Micellar Solvent	150 BS 1.1 S.G.	20-30	9,000 psig
Gelled Water	1,000	24			20-30	9,000 psig
15% HCL Àcid	3,000	71	Scale Inhibitor & Micellar Solvent	150 BS 1.1 S.G.	20-30	9,000 psig
Flush (Btm Perf)	6,500	155		, ₁ , , 10, 2	20-30	9,000 psig
Totals	21,700	517				

- Monitor well flow back as required. If well flows, immediately run a 24 hr flowing bottomhole pressure survey using electronic gauges. RU swab equipment and swab back acid job until pH is above 7 as required. Do not place the ESP in hole with a low pH.
- Release 7" packer and TOH w/ 3-1/2" tubing. 7.
- Evaluate well potential using a electric submersible pump. TIH w/ new trade-in Centrilift electric submersible pump as follows: downhole pressure sensor, 130 hp motor, seal section, pump intake gas separator, 550 stage Series 400 Type FC470 pump, 2-7/8" tubing and cable. Set electric submersible pump @ 11,300'. Place well on production. Recommended best efficiency pumping range using a variable speed drive for this pump is from a minimum of 250 BFPD at 30 hertz to a maximum of 720 BFPD at 90 hertz (see attached pump charts). Pump can operate up to a maximum of 850 BFPD at 90 hertz without operating outside upper operating range. Evaluate re-sizing pump if required based on downhole sensor pressure data.

GREATER ALTAMONT FIELD HARTMAN #2-31A3 Section 31 - T1S - R3W Duchesne County, Utah

Additional Perforations

Schlumberger	Schlumberger
Dual Laterolog	Cement Bond
Run #1 (11/25/89)	Run #1 (1/10/90)
11,356	11,356
11,369	11,370
11.384	11,385
11,395	11,395
11,415	11,416
11,426	11,427
11,500	11,500
11,507	11,508
11,518	11,519
11,535	11,537
11,544	11,545
11,553	11,553
11,560	11,560
11,567	11,669
11,578	11,578
11,592	11,592
11,607	11,608
11,616	11,616
11,625	11,626
11,646	11,646
11,665	11,666
11,674	11,676
11,706	11,706
11,719	11,721
11,729	11,730
11,734	11,735
11,743	11,743
11,758	11,758
11,768	11,769
11,860	11,861
11,885	11,886
11,895	11,896
11,901	11,901
11,910	11,911
11,917	11,919
11,934	11,935
11,944	11,944
11,952	11,853

Schlumberger	Schlumberger
Dual Laterolog	Cement Bond
Run #1 (11/25/89)	Run #1 (1/10/90)
44.050	11,960
11,959	11,966
11,965	11,977
11,976	11,988
11,986	11,993
11,993	12,006
12,005	12,018
12,016	12,026
12,025 12,030	12,030
The state of the s	12,039
12,038	12,044
12,043	12,059
12,058 12,115	12,116
	12,135
12,134	12,142
12,140	12,151
12,150	12,174
12,173	12,206
12,205	
12,218	12,219
12,233	12,236 12,244
12,243	12,253
12,252	12,253
12,259	
12,266	12,267
12,283	12,284 12,292
12,290	
12,299	12,299
12,313	12,314
12,319	12,319
12,338	12,339
12,361	12,361
12,368	12,369
12,382	12,382
12,404	12,405
12,410	12,410
12,437	12,437
12,442	12,443

75 ZONES

S. H. Laney 4/29/96

GREATER ALTAMONT FIELD HARTMAN #2-31A3 Section 31 - T1S - R3W Duchesne County, Utah

Reperfs and Infill Perfs

Schlumberger Dual Laterolog Run #1 (11/25/89)	Schlumberger Cement Bond Run #1 (1/10/90)
12,467	12,468
12,480	12,481
12,484	12,485
12,501	12,502
12,508	12,508
12,513	12,513
12,521	12,522

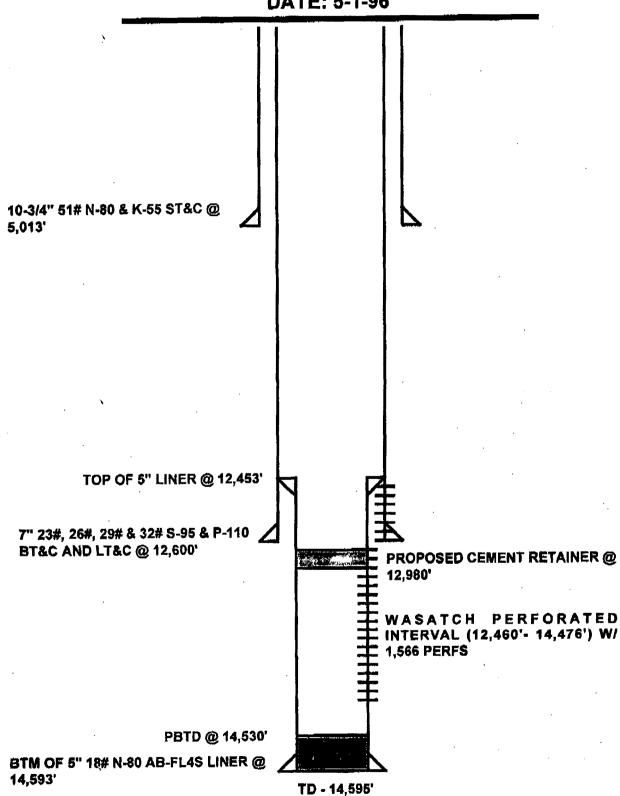
Schlumberger	Schlumberger
Dual Ind - SFL	Cement Bond
Run #2 (1/2/90)	Run #1 (1/10/90)
12,653	12,654
12,710	12,710
12,717	12,718
12,733	12,734
12,741	12,742
12,747	12,748
12,753	12,753
12,763	12,764
12,775	12,776
12,793	12,794
12,821	12,821
12,828	12,828
12,840	12,841
12,879	12,880
12,888	12,889
12,915	12,916
12,930	12,931
12,948	12,949
12,957	12,958
12,965	12,966

27 ZONES

S. H. Laney 4/26/96

HARTMAN #2-31A3 WELLBORE SCHEMATIC SECTION 31 T1S R3W DUCHESNE COUNTY, UTAH

DATE: 5-1-96



25-06

1995

COASTAL OIL & GAS CORPORATION CHRONOLOGICAL HISTORY

HARTMAN #2-31A3 (STIMULATION WORKOVER) ALTAMONT FIELD DUCHESNE COUNTY, UT WI: 99.35959% COGUSA AFE: 26244 TD: 14,595' PBTD: 14,530' 5" LINER @ 12,453'-14,476'

PERFS: 12,460'-14,476' CWC(M\$): 147.0

PU 7" pkr plucker. 3/26/96

MIRU. ND WH, NU Hydril. RU centrilift spoolers. POOH w/366 jts 27/5" tbg & 12,000' of #4 cable. LD centrilift pump assembly. Test pump equip @ sfc, #4 cable tested bad, btm pump was locked up. Meter tested good. RD centrilift. ND Hydril. NU BOP. CC: \$4805.

Work pkr @ 12,383'. 3/27/96

0# SIP. RIH w/7" pkr plucker & 379 jts 21/4" tbg. Tag 7" pkr @ 12,383". RU power swivel & strip head. DO 7" pkr for 5 hrs but could not est movement in pkr. Well would circ after pumping 775 bbls 2% KCL water. Cont to work the & circ well for 11/2 hrs, but could not pull pkr. Pull string to 110,000# & set in slips. CC: \$9650.

Check fluid level. 3/28/96

0# SIP. Work 7" pkr @ 12,383', holding 1800# right hand torque. Max pulled 115,000#, could not move pkr. RD power swivel. RU swab equip. FL 1st run @ 1800'. Made 25 swab runa, rec 128 BW, 40 BO/81/2 hrs. Avg swab rate 20 BPH. FL last run @ 6500'. RD swab equip. Work the for 1 hr & still could not est movement in pkr. CC: \$16,320.

3/29/96 PU pkr plucker, B.S. & jars.

0# SIP. RU power swivel. Work the to 31/2 hrs. able to est free the movement. RD swivel. POOH w/378 jts 27/6" the & 7" pkr plucker. Did not have pkr assembly. Break out pkr plucker @ sfc. 4" grapple badly swelled, shoe was packed w/bands & pump armor. CC: \$19,170.

No activity. 3/30-31/96

Cont to work pkr assy. 4/1/96

100 # SIP. PU 7" pkr plucker, B sub & jars. RIH w/same & 379 jts 21/2" tbg. Tag 7" pkr @ 12,383', jar on pkr for 1 hour, could not pull past 12,383'. RIH & RU power swivel, DO pkr on 5" liner top. Note: 35' of travel in pkr assy - no restriction in swivel while milling. RD swivel. Still could not pull pkr assy past 12,383'. Pull string to 120,000#, set in slips. CC: \$25,660.

4/2/96

PU tools. 100# SIP. RU power swivel. DO 7" pkr for 1 hr, shoe depth @ 12,418', est free movement in thg, RD swivel. POOH w/379 jts 21/6" tbg, jars, B sub, 7" pkr plucker, pkr mandrel & pkr body. MO extension & tail pipe assembly remaining in well. Break out tools @ sfc. CC: \$27,550.

4/3/96 POOH w/tbg.

100# SIP. RIH w/5%"x5"x41/2" shoe w/5" grapple (top), B sub, jars & 380 jts 21/6" tbg. Tag fish top @ 12,418'. RU power swivel. DO & work 7" pkr assy for 41/2 hrs, made approx 5'. Jarred on the 6 times @ 120,000#, appeared to pull free. RD power swivel, POOH w/42 jts 21/2" tbg. Tbg plugged w/oil. Pump 2500# max psi down esg to clear plug. Cont to circ w/100 bbls 2% KCL water. EO T @ 11,091'. CC: \$35,245.

Cout to RIH w/tbg, shoe assy 7 overshot. 4/4/96 0# SIP. POOH w/338 jts 21/6" tbg, jars, B sub & 57/6"x5" shoe (collars off mill out extension lodged in

shoe). Call for new shoe & 4-4%" drill collars. PU & RIH w/5\"x5\"x18" shoe w/5" grapple (top), OS, B sub, jars 4'4%" drill collars & excel sub. Cont to RJH w/same & 262 jts 27%" tbg to 8136'. CC: \$39,165.

4/5-7/96 No activity.

COASTAL OIL & GAS CORPORATION CHRONOLOGICAL HISTORY

HARTMAN #2-31A3 (STIMULATION WORKOVER) ALTAMONT FIELD DUCHESNE COUNTY, UT WI: 99.35959% COGUSA AFE: 26244

4/8/96

WOO.

0# SIP. RIH w/134 jts 276" tbg. Tag fish top @ 12,418'. RU power swivel, work fish for 1 hr, jarring @ 120,000# (no movement). RD swivel. RU swab equip. Made 7 runs & rec 45 BW w/no fluid movement on csg. Attempt to rel grapple, but pulled free to 12,383' (35'). Appeared to work through tight spot. POOH w/379 jts 276" tbg & fishing assy, did not have fish. Break out OS @ sfc, found metal shaving in grapple with only minor damage. Fish appeared to btm out in OS. CC: \$46,005.

4/9/96 PU tools.

0# SIP. Call out Dis-log Svcs. RU WL. RIH w/collar loc & spud assy, tag fish top @ 12,418'. Cold not get into tail pipe assy, POOH w/same. RIH w/156' OD sinker bar & stablizer, max depth 12,422' (4' into mill out extension), POOH w/same, tools showed junk inside fish. Break pin on 5%" extension while making up tools, send to Vernal for repairs. CC; \$49,265.

4/10/96 LD drill collars.

100# SIP. RIH w/57%" OS w/47%" grapple, 2.65 extension, B sub, jars, 4-4%" drill collars, excel sub & 375 jts 27%" tbg. Latch onto fish @ 12.418'. Jar on fish for 4 hrs @ 120,000# & moved fish up hole approx 4', jars showing signs of wear. Fish appeared to pull free. POOH w/375 jts 27%" tbg, fishing assy &mill out extension w/tail pipe assy. CC: \$56,450.

4/11/96 CO 5" liner

200# SIP, LD 4-4%" drill collars & load fishing equip. PU & RIH w/4%" mill, CO assy & 70 jts 2\%" the Cont to RIH w/3 12 jts 2\%" the Tag 5" liner @ 12,453'. Work through liner for I hr w/slight restriction. POOH w/4 jts 2\%" the to 12,330'. CC: \$59,015.

4/12/96 POOH w/tbg, CO assy & 41/6" mill.

100# SIP. RIH w/28 jts tbg, tag fill @ 12,705', RU power swivel. CO from 12,705'-12,713' (8')/6 hrs drilling - hard drilling - possible metal. Rd swivel. POOH w/116 jts 27%" tbg to 9313'. CO assy appeared to be plugged. CC: \$64,220.

4/13-14/96 No activity.

4/15/96 CO 5" liner.

100# SIP. POOH w/250 jts 27%" tbg, 70 jts 2%" tbg, CO assy & 4%" mill. Btm 2 jts were plugged w/metal shaving, scale, drilling mud & form. 4%" mill was worn out. Pump out plugged jts @ sfc. RIH w/new 4%" mill, CO assy, 69 jts 2%" tbg & 312 jts 2%" tbg to 12,419'. CC: \$67,230.

4/16/96 POOH w/23%" tbg, CO ass & 41/6".

100# SIP. RIH w/21 jts 27%' tbg. Tag fill @ 12,713'. RU power swivel. CO from 12,713'-12,717'(4')/5 hrs. Hard drilling. CO assy acted plugged. RD swivel. POOH w/333 jts 27%' tbg to 2228'. CC; \$72,040.

4/17/96 CO 5" liner.

100# SIP. POOH w/69 jts 2%" tbg, CO assy & 4\%" mill. Btm 2 jts & 4\%" mill were plugged w/scale, mill was badly damaged, Pump 800 BFW @ 5 BPM, could not fill hole. RIH w/4\%" rock bit, 19 jts 2\%" tbg, CO assy, 50 jts 2\%" tbg & 312 jts 2\%" tbg to 12,417. CC: \$78,340.

4/18/96 WOO.

0# SIP. RIH w/21 jts 2%" tbg, tag fill @ 12.717", RU power swivel. CO from 12,717-12,725'(8'/3 hrs). CO assy acted plugged, RD swivel. POOH w/333 jts 2\%" tbg, 69 jts 2\%" tbg, CO assy & 4\%" rock bit. Btm 2 jts & bit were plugged w/scale. Bit was locked up & cones flat on btm. Pump out plugged jts @ sfc. CC: \$43,040.

COASTAL OIL & GAS CORPORATION CHRONOLOGICAL HISTORY

HARTMAN #2-31A3 (STIMULATION WORKOVER) ALTAMONT FIELD DUCHESNE COUNTY, UT WI: 99.35959% COGUSA AFE:

4/19/96 RIH w/21/6" the & try to est circ.

WOO. RIH w/70 jts 23%" tbg. POOH & LD same. PU & RIH w/416" drag bit & 75 jts 276" yellow bond tbg. cont to RIH w/329 jts 276" tbg. EOT @ 12,720'. Pump 50 bbls 8.4# mud, ingredient: 48 sx liquid csg, I sx caustic soda, I can PHPH, I gal xcide 207. Follow w/17.5 BW. Balance mud top @ 11,098', est FL @ \$100'. POOH w/21 jts 276" tbg to 12,359'. Pump 15 BW down csg. CC: \$88,840.

4/20-296 SDFWND - no activity.

4/22/96 Heat well w/250° water to clear thg.

100# SIP. RIH w/21 jts 27/4" tbg. RU power swivel & strip head. Pump 536 BFW to est circ. Pump rate 9 BPM, est returns 3 BPM @ 600#. DO from 12,725'-12,735' (10')/1 hr. Tbg appeared to wax off. Very little fluid movement up tbg & heavy wax plugs @ sfc. RU hot oilers & heat esg w/300 BW @ 250°. Still could not est fluid movement in tbg. CC: \$92,950.

4/23/96 Cont to CO 5" liner.

Heat csg w/400 bbls of 250° water @ 2 BPM. W/rig pum, pump 200 BW @ 9 BPM to fill well. Pump 100 BW @ 8 BPM, mas psi 1200# down csg to clear tbg, were unable to clear tbg. RD power swivel. Pressure tbg to 5000#, still could not clear tbg. Swab down tbg. POOH w/304 jts 2\%" tbg & 4\%" drag bit. Drag bit & 10' of btm jt plugged w/scale. Clear bit & tbg. RIH w/same as pulled. Tag fill @ 12,735'. RU power swivel. Pump 550 BW to est circ, reverse circ @ 9 BPM, 3 BPM @ 6000# w/44\% returns. DO from 12,735' to 13,102'(367')/12 hrs. Avg rate 30'/hr. CC: \$102,870.

4/24/96 Cont to RIH w/21/6" tbg.

Cont to CO 5" esg from 13,102'-13,120'(18')/10 hrs hard drilling. Heavy black shale in returns. Biggest pieces %" in diameter. Pump rate 9 BPM @ 600#, 3½ BPM returns. Tog plugged off @ bit & could not be cleared. RD swivel & strip head. Swab down tog. POOH w/413 jts 2½" tog & 4½" drag bit. Swabbing down tog as needed. Drag bit & btm 3 jts plugged w/scale. Blades on drag bit were rounded & ½" under gauge. RIH w/4½" drag bit w/3-1½ ports & 210 jts 2½" tog. EOT 6860', CC; \$110,760.

4/25/96 CO 5" liner.

RIH w/203 jts 276" tbg, tag fill @ 13,105' (last 15' of hole). RU power swivel & strip head. Pump 760 BW @ 9 BPM to est circ. 3 bbls returns @ 600#. DO from 13,105'-13,121'(16')/17 hrs. Large amount of black shale & sand stone in returns to sfc. Est fluid loss for 24 hrs 5400 bbls. CC: \$120,730.

4/26/96 WOO.

Pump 9 BPM @ 600#, 3 BPM returns. DO from 13,121'-13,125'(4')/7 hrs hard drilling. Shale, frac balls in returns. DO from 13,125'-13,362'(237')/7 hrs drilling. W/EOT @ 13,362' returns drop to 1 BPM, pump rate 9 BPM @ 100#. Pump 350 bbls @ 9 BPM, could not increase circ. Pump 80 bbls down tbg to clear. RD power swivel. Pull out of 5' liner, EOT @ 12,345'. Est fluid loss for day 4600 bbls. CC: \$130,805.

4/27/96 Cont to POOH w/tbg & 41/4" drag bit.

Well on vac. Flush the w/70 BW, WOO. Call for liquid csg patch. FL @ 5928', RIH w/36 just 27%" the Tag fill @ 13,197', lost 165' of hole. Pump 30 bbls liquid csg & bit plugged. Fill csg & attempt to clar bit, could not. Swab liquid csg back to water truck. Cont to swab the down to 5500'. POOH w/155 jts 27%" the to 8227. CC: \$135,485.

4/28/96 WOO

0# SIP. POOH w/252 jts 27%" the & 41%" drag bit, blades on bit 1/2" under on each blade. Pulg worked clear, the on vac ofter last swab run. CC: \$136,915.

4/29/96 WOO.

0# SIP. Evaluating lower Wasatch potential. CC; \$138,480.

COASTAL OIL & GAS CORFORATION 600 17TH STREET, SUITE 800S DENVER, COLORADO 80201

DATE: 5/6/96

FACSIMILE TRANSMITTAL PAGE

THIS TRANSMISSION CONSISTS OF $\frac{9}{2}$ PAGES (INCLUDING COVER)

TO: Mike Hebertson
COMPANY/FIRM: State of Utah
CITY/STATE:
FAX #: (801) 359-3940 CONFIRMATION #: (801) 538-5333
FROM: Shula Brened
TELEPHONE #: (303) 573-4455
INSTRUCTIONS: Mike - Rhase call after you have
reviewed and let me know if there are any conditions,
of approval. Shanks for your prompt attentions to this!

CONFIDENTIALITY NOTICE: This message is intended only for the use of the individual or entity designated above, is confidential, and may contain information that is legally privileged or exempt from disclosure under applicable law. You are hereby notified that any dissemination, distribution, copying, or use of or reliance upon the information contained in and transmitted with this facsimile transmission by or to anyone other than the recipient designated above by the sender is <u>not authorized and strictly prohibited</u>. If you have received this communication in error, please immediately notify the sender by telephone and return it to the sender by U.S. Mail or destroy it if authorization is granted by the sender. Thank you.

IF YOU HAVE ANY TROUBLE RECEIVING THE ABOVE SPECIFIED PAGES, PLEASE NOTIFY SENDER.

DIVISION OF OIL, GAS AND M	5. Lease Designation and Serial Number: Fee 6. If Indian, Allottee or Tribe Name:			
SUNDRY NOTICES AND REPORTS O	N/A N/A			
Do not use this form for proposals to drill new wells, deepen existing wells, or to regree Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form or su	no udged and abandoned wells. 7. Unit Agreement Name: N/A N/A			
1. Type of Well: OIL \overline{X} GAS OTHER:	8. Well Name and Number: Hartman #2-31A3			
2. Name of Operator: Coastal Oil & Gas Corporation	9. API Well Number: 43-013-31243			
3. Address and Telephone Number: P.O. Box 749, Denver, CO 80201-0749	(303) 573-4455 10. Field and Pool, or Wildcat: Altamont			
4. Location of Well Footages: 2437' FSL & 1505' FWL QQ, Sec., T., R., M.: SWSW Section 31—T1S—R3W	County: Duchesne State: Utah			
11. CHECK APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPORT, OR OTHER DATA			
NOTICE OF INTENT (Submit In Duplicate) Abandon New Construction	SUBSEQUENT REPORT (Submit Original Form Only) Abandon * New Construction			
Repair Casing Pull or Alter Casing X Change of Plans X Recompletion Convert to Injection Perforate Fracture Treat or Acidize Vent or Flare Multiple Completion Water Shut-Off	Repair Casing Pull or Alter Casing Change of Plans Perforate Convert to Injection Vent or Flare Fracture Treat or Acidize Water Shut-Off Other			
Other Approximate date work will start Immediately	Date of work completion Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form. * Must be accompanied by a cement verification report.			
DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) Please see the attached workover procedure for work to be performed in the subject well. A change in the scope of work was necessitated by downhole problems encountered during workover operations. A Notice of Intent (dated 3/22/96) to clean out the wellbore, acidize the lower Wasatch perfs, and repair an electirc submersible pump was approved 3/27/96. Sand by Mike Hubertson & Hade of Utah 5/6/96				
13. Name & Signature: Speila Brine	Sheila Bremer Title: Environmental & Safety Analyst Date: 05/06/96			

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STATE OF UTAH PARTMENT OF NATURAL RESOURCES

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER:
SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hote depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL OIL WELL GAS WELL OTHER	8. WELL NAME and NUMBER:
2. NAME OF OPERATOR:	Exhibit "A" 9. API NUMBER:
El Paso Production Oil & Gas Company	
3. ADDRESS OF OPERATOR: 368 South 1200 East City Vernal STATE Utah ZIP 84078 435-789-4433 4. LOCATION OF WELL	10. FIELD AND POOL, OR WILDCAT:
FOOTAGES AT SURFACE:	COUNTY:
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:	STATE: UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA
TYPE OF SUBMISSION TYPE OF ACTION	
NOTICE OF INTENT	REPERFORATE CURRENT FORMATION
(Submit in Duplicate) ALTER CASING FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start: CASING REPAIR NEW CONSTRUCTION	TEMPORARILY ABANDON
CHANGE TO PREVIOUS PLANS OPERATOR CHANGE	TUBING REPAIR
CHANGE TUBING PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK (Submit Original Form Only)	WATER DISPOSAL
Date of work completion: CHANGE WELL STATUS PRODUCTION (START/RESUME)	WATER SHUT-OFF
COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL, SITE	X OTHER: Name Change
CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volume	es, etc.
As a result of the merger between The Coastal Corporation and	a wholly owned
subsidary of El Paso Energy Corporation, the name of Coastal C	Oil & Gas Corporation
has been changed to El Paso Production Oil & Gas Company effec	etive March 9, 2001.
See Exhibit "A"	
Bond # 400JU0708 _ Coastal Oil & Gas Corporation	
NAME (PLEASE PRINT) John T Elzner TITLE Vice Preside	ent
SIGNATURE DATE 06-15-01	
El Paso Production Oil & Gas Company John T Elzner Vice Preside	ent
SIGNATURE DATE 06-15-01	- AND THE STATE OF
(This space for State use only)	DEACN/EN

RECEIVED

JUN 19 2001

PROCEDURE

NOTE: USE ONLY CLEAN FRESH WATER. DO NOT USE PRODUCE WATER FORM ANY SOURCE DURING THIS WORKOVER.

- 1. MIRU wireline company. Wireline set cement retainer @ 12,980'.
- 2. MIRU Halliburton and pump 100 sx premium cement below cement retainer.
- 3. MIRU Oil Well Perforators(OWP) and RU 5,000 psig lubricator. Perforate new upper Wasatch footages (11,356' through 12,443') and reperforate old intervals and add infill perfs (12,468' through 12,966') as shown on the attachment from Steve Laney. Perforate using 4" and 3-1/8" casing guns with 3 SPF @ 120 degree phasing. Total of 102 zones and 306 perforations. Selected footages correlate to Schlumberger CBL dated 1-10-90(Run #1).
- 4. TIH w/ 7" 29# retrievable packer on 3-1/2" 9.3 # P-110 tubing. Set packer @ +/- 11,200'.
- 5. MIRU Dowell and acid stimulate **Wasatch intervals (11,356' to 12,966')** as shown below w/ 9,000 gals of 15% HCL acid. **Heat all fluids to 150 F.** Load backside annulus while pumping down tubing to maintain a hydrostatic column.

Fluid Description	Volume (Gals)	Volume (Bbl's)	Special Additives	Diverters	Rate (BPM)	Maximum Surface Pressure
Pad	4,200	100	Scale Inhibitor		20-30	9,000 psig
15% HCL Acid	3,000	71	Scale Inhibitor & Micellar Solvent	150 BS 1.1 S.G.	20-30	9,000 psig
Gelled Water	1,000	24			20-30	9,000 psig
15% HCL Acid	3,000	71	Scale Inhibitor & Micellar Solvent	150 BS 1.1 S.G.	20-30	9,000 psig
Gelled Water	1,000	24			20-30	9,000 psig
15% HCL Acid	3,000	71	Scale Inhibitor & Micellar Solvent	150 BS 1.1 S.G.	20-30	9,000 psig
Flush (Btm Perf)	6,500	155			20-30	9,000 psig
Totals	21,700	517				

- 6. Monitor well flow back as required. If well flows, immediately run a 24 hr flowing bottomhole pressure survey using electronic gauges. RU swab equipment and swab back acid job until pH is above 7 as required. Do not place the ESP in hole with a low pH.
- 7. Release 7" packer and TOH w/ 3-1/2" tubing.
- 8. Evaluate well potential using a electric submersible pump. TIH w/ new trade-in Centrilift electric submersible pump as follows: downhole pressure sensor, 130 hp motor, seal section, pump intake gas separator, 550 stage Series 400 Type FC470 pump, 2-7/8" tubing and cable. Set electric submersible pump @ 11,300'. Place well on production. Recommended best efficiency pumping range using a variable speed drive for this pump is from a minimum of 250 BFPD at 30 hertz to a maximum of 720 BFPD at 90 hertz (see attached pump charts). Pump can operate up to a maximum of 850 BFPD at 90 hertz without operating outside upper operating range. Evaluate re-sizing pump if required based on downhole sensor pressure data.

GREATER ALTAMONT FIELD HARTMAN #2-31A3 Section 31 - T1S - R3W Duchesne County, Utah

Additional Perforations

Schlumberger	Schlumberger
Dual Laterolog	Cement Bond
Run #1 (11/25/89)	Run #1 (1/10/90)
11,356	11,356
11,369	11,370
11,384	11,385
11,395	11,395
11,415	11,416
11,426	11,427
11,500	11,500
11,507	11,508
11,518	11,519
11,535	11,537
11,544	11,545
11,553	11,553
11,560	11,560
11,567	11,569
11,578	11,578
11,592	11,592
11,607	11,608
11,616	11,616
11,625	11,626
11,646	11,646
11,665	11,666
11,674	11,676
11,706	11,706
11,719	11,721
11,729	11,730
11,734	11,735
11,743	11,743
11,758	11,758
11,768	11,769
11,860	11,861
11,885	11,886
11,895	11,896
11,901	11,901
11,910	11,911
11,917	11,919
11,934	11,935
11,944	11,944
11,952	11,853

Schlumberger	Schlumberger
Dual Laterolog	Cement Bond
Run #1 (11/25/89)	Run #1 (1/10/90)
	44.000
11,959	11,960
11,965	11,966
11,976	11,977
11,986	11,988
11,993	11,993
12,005	12,006
12,016	12,018
12,025	12,026
12,030	12,030
12,038	12,039
12,043	12,044
12,058	12,059
12,115	12,116
12,134 12,140	12,135
12,140	12,142
12,150	12,151
12,173	12,174
12,205	12,206
	12,219
12,218 12,233	12,235
12,243	12,244
12,252	12,253
12,259	12,260
12,266	12,267
12,283	12,284
12,290	12,292
12,299	12,299
12,313	12,314
12.319	12,319
12,319 12,338	12,339
12,361	12,361
12,368	12,369
12,382	12,382
12,404	12,405
12,410	12,410
12,437	12,437
12,442	12,443
12,442	12,770

75 ZONES

S. H. Laney 4/29/96

GREATER ALTAMONT FIELD HARTMAN #2-31A3 Section 31 - T1S - R3W Duchesne County, Utah

Reperfs and Infill Perfs

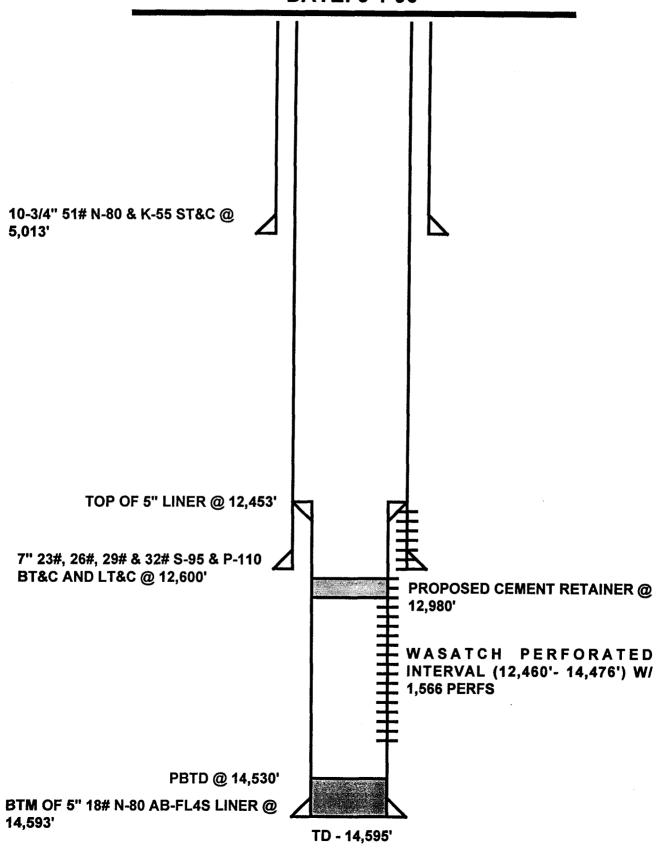
Schlumberger Dual Laterolog Run #1 (11/25/89)	Schlumberger Cement Bond Run #1 (1/10/90)
12,467	12,468
12,480	12,481
12,484	12,485
12,501	12,502
12,508	12,508
12,513	12,513
12,521	12,522

Schlumberger	Schlumberger
Dual Ind - SFL	Cement Bond
Run #2 (1/2/90)	Run #1 (1/10/90)
12,653	12,654
12,710	12,710
12,717	12,718
12,733	12,734
12,741	12,742
12,747	12,748
12,753	12,753
12,763	12,764
12,775	12,776
12,793	12,794
12,821	12,821
12,828	12,828
12,840	12,841
12,879	12,880
12,888	12,889
12,915	12,916
12,930	12,931
12,948	12,949
12,957	12,958
12,965	12,966

27 ZONES

HARTMAN #2-31A3 WELLBORE SCHEMATIC SECTION 31 T1S R3W DUCHESNE COUNTY, UTAH

DATE: 5-1-96



COASTAL OIL & GAS CORPORATION CHRONOLOGICAL HISTORY

HARTMAN #2-31A3 (STIMULATION WORKOVER)
ALTAMONT FIELD
DUCHESNE COUNTY, UT
WI: 99.35959% COGUSA AFE: 26244
TD: 14,595' PBTD: 14,530'
5" LINER @ 12,453'-14,476'
PERFS: 12,460'-14,476'
CWC(M\$): 147.0

3/26/96 PU 7" pkr plucker.

MIRU. ND WH, NU Hydril. RU centrilift spoolers. POOH w/366 jts 27%" tbg & 12,000' of #4 cable. LD centrilift pump assembly. Test pump equip @ sfc, #4 cable tested bad, btm pump was locked up.

Meter tested good. RD centrilift. ND Hydril. NU BOP. CC: \$4805.

3/27/96 Work pkr @ 12,383'.

0# SIP. RIH w/7" pkr plucker & 379 jts 21%" tbg. Tag 7" pkr @ 12,383'. RU power swivel & strip head. DO 7" pkr for 5 hrs but could not est movement in pkr. Well would circ after pumping 775 bbls 2% KCL water. Cont to work tbg & circ well for 1½ hrs, but could not pull pkr. Pull string to 110,000# & set in

slips. CC: \$9650.

3/28/96 Check fluid level.

0# SIP. Work 7" pkr @ 12,383', holding 1800# right hand torque. Max pulled 115,000#, could not move pkr. RD power swivel. RU swab equip. FL 1st run @ 1800'. Made 25 swab runs, rec 128 BW, 40 BO/8½ hrs. Avg swab rate 20 BPH. FL last run @ 6500'. RD swab equip. Work tbg for 1 hr & still could not

est movement in pkr. CC: \$16,320.

9/29/96 PU pkr plucker, B.S. & jars.

0# SIP. RU power swivel. Work tbg to 3½ hrs, able to est free tbg movement. RD swivel. POOH w/378 jts 21/6" tbg & 7" pkr plucker. Did not have pkr assembly. Break out pkr plucker @ sfc. 4" grapple badly

swelled, shoe was packed w/bands & pump armor. CC: \$19,170.

3/30-31/96 No activity.

4/1/96 Cont to work pkr assy.

100 # SIP. PU 7" pkr plucker, B sub & jars. RIH w/same & 379 jts 27%" tbg. Tag 7" pkr @ 12,383', jar on pkr for 1 hour, could not pull past 12,383'. RIH & RU power swivel, DO pkr on 5" liner top. Note: 35' of travel in pkr assy - no restriction in swivel while milling. RD swivel. Still could not pull pkr assy past

12,383'. Pull string to 120,000#, set in slips. CC: \$25,660.

4/2/96 PU tools.

100# SIP. RU power swivel. DO 7" pkr for 1 hr, shoe depth @ 12,418', est free movement in tbg, RD swivel. POOH w/379 jts 21%" tbg, jars, B sub, 7" pkr plucker, pkr mandrel & pkr body. MO extension

& tail pipe assembly remaining in well. Break out tools @ sfc. CC: \$27,550.

4/3/96 POOH w/tbg.

100# SIP. RIH w/57%"x5"x41/2" shoe w/5" grapple (top), B sub, jars & 380 jts 27%" tbg. Tag fish top @ 12,418'. RU power swivel. DO & work 7" pkr assy for 41/2 hrs, made approx 5'. Jarred on tbg 6 times @ 120,000#, appeared to pull free. RD power swivel, POOH w/42 jts 27%" tbg. Tbg plugged w/oil. Pump 2500# max psi down csg to clear plug. Cont to circ w/100 bbls 2% KCL water. EO T @ 11,091'. CC:

\$35,245.

4/4/96 Cont to RIH w/tbg, shoe assy 7 overshot.

0# SIP. POOH w/338 jts 2½" tbg, jars, B sub & 5½"x5" shoe (collars off mill out extension lodged in shoe). Call for new shoe & 4-4½" drill collars. PU & RIH w/5½"x5½"x18" shoe w/5" grapple (top), OS, B sub, jars 4'4½" drill collars & excel sub. Cont to RIH w/same & 262 jts 2½" tbg to 8136'. CC: \$39,165.

4/5-7/96 No activity.

COASTAL OIL & GAS CORPORATION CHRONOLOGICAL HISTORY

HARTMAN #2-31A3 (STIMULATION WORKOVER) ALTAMONT FIELD DUCHESNE COUNTY, UT WI: 99.35959% COGUSA AFE: 26244

4/8/96 WOO.

0# SIP. RIH w/134 jts 2%" tbg. Tag fish top @ 12,418'. RU power swivel, work fish for 1 hr, jarring @ 120,000# (no movement). RD swivel. RU swab equip. Made 7 runs & rec 45 BW w/no fluid movement on csg. Attempt to rel grapple, but pulled free to 12,383' (35'). Appeared to work through tight spot. POOH w/379 jts 2%" tbg & fishing assy, did not have fish. Break out OS @ sfc, found metal shaving in grapple with only minor damage. Fish appeared to btm out in OS. CC: \$46,005.

4/9/96 PU tools

0# SIP. Call out Dia-log Svcs. RU WL. RIH w/collar loc & spud assy, tag fish top @ 12,418'. Cold not get into tail pipe assy, POOH w/same. RIH w/1%' OD sinker bar & stablizer, max depth 12,422' (4' into mill out extension), POOH w/same, tools showed junk inside fish. Break pin on 5%' extension while making up tools, send to Vernal for repairs. CC; \$49,265.

4/10/96 LD drill collars.

100# SIP. RIH w/5%" OS w/4%" grapple, 2.65 extension, B sub, jars, 4-4%" drill collars, excel sub & 375 jts 2%" tbg. Latch onto fish @ 12,418'. Jar on fish for 4 hrs @ 120,000# & moved fish up hole approx 4', jars showing signs of wear. Fish appeared to pull free. POOH w/375 jts 2%" tbg, fishing assy &mill out extension w/tail pipe assy. CC: \$56,450.

4/11/96 CO 5" liner.

200# SIP. LD 4-4¼" drill collars & load fishing equip. PU & RIH w/4½" mill, CO assy & 70 jts 2¾" tbg. Cont to RIH w/312 jts 2½" tbg. Tag 5" liner @ 12,453'. Work through liner for 1 hr w/slight restriction. POOH w/4 jts 2½" tbg to 12,330'. CC: \$59,015.

4/12/96 POOH w/tbg, CO assy & 41/6" mill.

100# SIP. RIH w/28 jts tbg, tag fill @ 12,705', RU power swivel. CO from 12,705'-12,713' (8')/6 hrs drilling - hard drilling - possible metal. Rd swivel. POOH w/116 jts 27%" tbg to 9313'. CO assy appeared to be plugged. CC: \$64,220.

4/13-14/96 No activity.

4/15/96 CO 5" liner.

100# SIP. POOH w/250 jts 21/6" tbg, 70 jts 23/6" tbg, CO assy & 41/6" mill. Btm 2 jts were plugged w/metal shaving, scale, drilling mud & form. 41/6" mill was worn out. Pump out plugged jts @ sfc. RIH w/new 41/6" mill, CO assy, 69 jts 23/6" tbg & 312 jts 21/6" tbg to 12,419'. CC: \$67,230.

4/16/96 POOH w/2%" tbg, CO ass & 41/8".

100# SIP. RIH w/21 jts 21/8" tbg. Tag fill @ 12,713'. RU power swivel. CO from 12,713'-12,717'(4')/5 hrs. Hard drilling. CO assy acted plugged. RD swivel. POOH w/333 jts 27/8" tbg to 2228'. CC: \$72,040.

4/17/96 CO 5" liner.

100# SIP. POOH w/69 jts 2%" tbg, CO assy & 4%" mill. Btm 2 jts & 41%" mill were plugged w/scale, mill was badly damaged. Pump 800 BFW @ 5 BPM, could not fill hole. RIH w/41%" rock bit, 19 jts 2%" tbg, CO assy, 50 jts 2%" tbg & 312 jts 21%" tbg to 12,417'. CC: \$78,340.

4/18/96 WOO.

0# SIP. RIH w/21 jts 2%" tbg, tag fill @ 12,717', RU power swivel. CO from 12,717'-12,725'(8'/3 hrs). CO assy acted plugged, RD swivel. POOH w/333 jts 2%" tbg, 69 jts 2%" tbg, CO assy & 4%" rock bit. Btm 2 jts & bit were plugged w/scale. Bit was locked up & cones flat on btm. Pump out plugged jts @ sfc. CC: \$43,040.

COASTAL OIL & GAS CORPORATION CHRONOLOGICAL HISTORY

HARTMAN #2-31A3 (STIMULATION WORKOVER) ALTAMONT FIELD DUCHESNE COUNTY, UT WI: 99.35959% COGUSA AFE:

4/19/96

RIH w/21/8" tbg & try to est circ.

WOO. RIH w/70 jts 2%" tbg, POOH & LD same. PU & RIH w/41/6" drag bit & 75 jts 27/6" yellow bond tbg, cont to RIH w/329 jts 27/6" tbg. EOT @ 12,720'. Pump 50 bbls 8.4# mud, ingredient: 48 sx liquid csg, 1 sx caustic soda, 1 can PHPH, 1 gal xcide 207. Follow w/17.5 BW. Balance mud top @ 11,098', est FL @ 8100'. POOH w/21 jts 27/6" tbg to 12,359'. Pump 15 BW down csg. CC: \$88,840.

4/20-296 SDFWND - no activity.

4/22/96 Heat well w/250° water to clear tbg.

100# SIP. RIH w/21 jts 27%" tbg. RU power swivel & strip head. Pump 536 BFW to est circ. Pump rate 9 BPM, est returns 3 BPM @ 600#. DO from 12,725'-12,735' (10')/1 hr. Tbg appeared to wax off. Very little fluid movement up tbg & heavy wax plugs @ sfc. RU hot oilers & heat csg w/300 BW @ 250°. Still could not est fluid movement in tbg. CC: \$92,950.

4/23/96 Cont to CO 5" liner.

Heat csg w/400 bbls of 250° water @ 2 BPM. W/rig pum, pump 200 BW @ 9 BPM to fill well. Pump 100 BW @ 8 BPM, mas psi 1200# down csg to clear tbg, were unable to clear tbg. RD power swivel. Pressure tbg to 5000#, still could not clear tbg. Swab down tbg. POOH w/304 jts 276" tbg & 416" drag bit. Drag bit & 10' of btm jt plugged w/scale. Clear bit & tbg. RIH w/same as pulled. Tag fill @ 12,735'. RU power swivel. Pump 550 BW to est circ, reverse circ @ 9 BPM, 3 BPM @ 6000# w/44% returns. DO from 12,735' to 13,102'(367')/12 hrs. Avg rate 30'/hr. CC: \$102,870.

4/24/96 Cont to RIH w/21/6" tbg.

Cont to CO 5" csg from 13,102'-13,120'(18')/10 hrs hard drilling. Heavy black shale in returns. Biggest pieces 34" in diameter. Pump rate 9 BPM @ 600#, 3½ BPM returns. Tbg plugged off @ bit & could not be cleared. RD swivel & strip head. Swab down tbg. POOH w/413 jts 276" tbg & 416" drag bit. Swabbing down tbg as needed. Drag bit & btm 3 jts plugged w/scale. Blades on drag bit were rounded & 1/2" under gauge. RIH w/416" drag bit w/3-116 ports & 210 jts 276" tbg. EOT 6860'. CC: \$110,760.

4/25/96 CO 5" liner.

RIH w/203 jts 27%" tbg, tag fill @ 13,105' (last 15' of hole). RU power swivel & strip head. Pump 760 BW @ 9 BPM to est circ. 3 bbls returns @ 600#. DO from 13,105'-13,121'(16')/17 hrs. Large amount of black shale & sand stone in returns to sfc. Est fluid loss for 24 hrs 5400 bbls. CC: \$120,730.

4/26/96 WOO.

Pump 9 BPM @ 600#, 3 BPM returns. DO from 13,121'-13,125'(4')/7 hrs hard drilling. Shale, frac balls in returns. DO from 13,125'-13,362'(237')/7 hrs drilling. W/EOT @ 13,362' returns drop to 1 BPM, pump rate 9 BPM @ 100#. Pump 350 bbls @ 9 BPM, could not increase circ. Pump 80 bbls down tbg to clear. RD power swivel. Pull out of 5' liner, EOT @ 12,345'. Est fluid loss for day 4600 bbls. CC: \$130,805.

4/27/96 Cont to POOH w/tbg & 41/6" drag bit.

Well on vac. Flush tbg w/70 BW, WOO. Call for liquid csg patch. FL @ 5928', RIH w/36 just 2%" tbg. Tag fill @ 13,197', lost 165' of hole. Pump 30 bbls liquid csg & bit plugged. Fill csg & attempt to clar bit, could not. Swab liquid csg back to water truck. Cont to swab tbg down to 5500'. POOH w/155 jts 2%" tbg to 8227'. CC: \$135,485.

4/28/96 WOO.

0# SIP. POOH w/252 jts 2\%" tbg & 4\%" drag bit, blades on bit \%" under on each blade. Pulg worked clear, tbg on vac ofter last swab run. CC: \$136,915.

4/29/96 WOO.

0# SIP. Evaluating lower Wasatch potential. CC; \$138,480.

t and the state of	5. Lease Designation and Serial Number: Fee			
SUNDRY NOTICES AND REPORTS ON WELLS	6. If Indian, Allottee or Tribe Name: N/A			
Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells. Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.	7. Unit Agreement Name: N/A			
1. Type of Well: OIL $oxed{X}$ GAS $oxed{\Box}$ OTHER:	8. Well Name and Number: Hartman #2-31A3			
2. Name of Operator: Coastal Oil & Gas Corporation	9. API Well Number: 43 – 013 – 31243			
3. Address and Telephone Number: P.O. Box 749, Denver, CO 80201-0749 (303) 573-4455	10. Field and Pool, or Wildcat: Altamont			
4. Location of Well				
Footages: 2437' FSL & 1505' FWL	County: Duchesne			
QQ, Sec., T., R., M.: SWSW Section 31-T1S-R3W	State: Utah			
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA				
	SUBSEQUENT REPORT (Submit Original Form Only)			
Approximate date work will start Report results of Multiple Completions and COMPLETION OR RECOMPLETION REPORT	5/23/96 d Recompletions to different reservoirs on WELL RT AND LOG form.			
* Must be accompanied by a cement verification report. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) Please see the attached chronological history for work performed on the subject well. DECETIVE JUN 1 4 1995 DIV. OF OIL, GAS & MINING				
13. Name & Signature: Sheila Bremer Title: Environmental &	Safety Analyst Date: 06/11/96			

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HARTMAN #2-31A3 (STIMULATION WORKOVER)

ALTAMONT FIELD

DUCHESNE COUNTY, UT

WI: 99.35959% COGUSA AFE: 26244

TD: 14,595' PBTD: 14,530' 5" LINER @ 12,453'-14,476' PERFS: 12,460'-14,476'

CWC(M\$): 147.0

3/26/96 PU 7" pkr plucker.

MIRU. ND WH, NU Hydril. RU centrilift spoolers. POOH w/366 its 21/6" tbg & 12,000' of #4 cable. LD centrilift pump assembly. Test pump equip @ sfc, #4 cable tested bad, btm pump was locked up. Meter tested good. RD

centrilift. ND Hydril. NU BOP. CC: \$4805.

3/27/96 Work pkr @ 12,383'.

0# SIP. RIH w/7" pkr plucker & 379 its 21/6" tbg. Tag 7" pkr @ 12,383'. RU power swivel & strip head. DO 7" pkr for 5 hrs but could not est movement in pkr. Well would circ after pumping 775 bbls 2% KCL water. Cont to work tbg & circ well for 11/2 hrs, but could not pull pkr. Pull string to 110,000# & set in slips. CC: \$9650.

Check fluid level. 3/28/96

> 0# SIP. Work 7" pkr @ 12,383', holding 1800# right hand torque. Max pulled 115,000#, could not move pkr. RD power swivel. RU swab equip. FL 1st run @ 1800'. Made 25 swab runs, rec 128 BW, 40 BO/81/2 hrs. Avg swab rate 20 BPH. FL last run @ 6500'. RD swab equip. Work tbg for 1 hr & still could not est movement in pkr. CC:

\$16,320.

3/29/96 PU pkr plucker, B.S. & jars.

0# SIP. RU power swivel. Work tbg to 31/2 hrs, able to est free tbg movement. RD swivel. POOH w/378 jts 21/6" tbg & 7" pkr plucker. Did not have pkr assembly. Break out pkr plucker @ sfc. 4" grapple badly swelled, shoe was

packed w/bands & pump armor. CC: \$19,170.

3/30-31/96 No activity.

Cont to work pkr assy. 4/1/96

100 # SIP. PU 7" pkr plucker, B sub & jars. RIH w/same & 379 jts 21/6" tbg. Tag 7" pkr @ 12,383', jar on pkr for 1 hour, could not pull past 12,383'. RIH & RU power swivel, DO pkr on 5" liner top. Note: 35' of travel in pkr assyno restriction in swivel while milling. RD swivel. Still could not pull pkr assy past 12,383'. Pull string to 120,000#,

set in slips. CC: \$25,660.

4/2/96 PU tools.

100# SIP. RU power swivel. DO 7" pkr for 1 hr, shoe depth @ 12,418', est free movement in tbg, RD swivel. POOH w/379 jts 276" tbg, jars, B sub, 7" pkr plucker, pkr mandrel & pkr body. MO extension & tail pipe assembly

remaining in well. Break out tools @ sfc. CC: \$27,550.

4/3/96 POOH w/tbg.

100# SIP. RIH w/51/6"x5"x41/2" shoe w/5" grapple (top), B sub, jars & 380 jts 21/6" tbg. Tag fish top @ 12,418'. RU power swivel. DO & work 7" pkr assy for 41/2 hrs, made approx 5'. Jarred on tog 6 times @ 120,000#, appeared to pull free. RD power swivel, POOH w/42 jts 21/6" tbg. Tbg plugged w/oil. Pump 2500# max psi down csg to clear

plug. Cont to circ w/100 bbls 2% KCL water. EO T @ 11,091'. CC: \$35,245.

Cont to RIH w/tbg, shoe assy 7 overshot. 4/4/96

0# SIP. POOH w/338 jts 21/6" tbg, jars, B sub & 51/6"x5" shoe (collars off mill out extension lodged in shoe). Call for new shoe & 4-4%" drill collars. PU & RIH w/5%"x18" shoe w/5" grapple (top), OS, B sub, jars 4'4%" drill

collars & excel sub. Cont to RIH w/same & 262 jts 21/6" tbg to 8136'. CC: \$39,165.

4/5-7/96 No activity.

4/8/96

0# SIP. RIH w/134 jts 21/6" tbg. Tag fish top @ 12,418'. RU power swivel, work fish for 1 hr, jarring @ 120,000# (no movement). RD swivel. RU swab equip. Made 7 runs & rec 45 BW w/no fluid movement on csg. Attempt to rel grapple, but pulled free to 12,383' (35'). Appeared to work through tight spot. POOH w/379 its 21/6" tbg & fishing assy, did not have fish. Break out OS @ sfc, found metal shaving in grapple with only minor damage. Fish appeared

to btm out in OS. CC: \$46,005.

COASTAL OIL & GAS CORPORATION CHRONOLOGICAL HISTORY

HARTMAN #2-31A3 (STIMULATION WORKOVER) ALTAMONT FIELD DUCHESNE COUNTY, UT WI: 99.35959% COGUSA AFE: 26244

4/9/96

PU tools.

0# SIP. Call out Dia-log Svcs. RU WL. RIH w/collar loc & spud assy, tag fish top @ 12,418'. Cold not get into tail pipe assy, POOH w/same. RIH w/1%' OD sinker bar & stablizer, max depth 12,422' (4' into mill out extension), POOH w/same, tools showed junk inside fish. Break pin on 5¾' extension while making up tools, send to Vernal for repairs. CC; \$49,265.

4/10/96

LD drill collars.

100# SIP. RIH w/5%" OS w/47%" grapple, 2.65 extension, B sub, jars, 4-43%" drill collars, excel sub & 375 jts 27%" tbg. Latch onto fish @ 12,418'. Jar on fish for 4 hrs @ 120,000# & moved fish up hole approx 4', jars showing signs of wear. Fish appeared to pull free. POOH w/375 jts 27%" tbg, fishing assy &mill out extension w/tail pipe assy. CC: \$56,450.

4/11/96

CO 5" liner.

200# SIP. LD 4-44" drill collars & load fishing equip. PU & RIH w/41/6" mill, CO assy & 70 jts 21/6" tbg. Cont to RIH w/312 jts 21/6" tbg. Tag 5" liner @ 12,453'. Work through liner for 1 hr w/slight restriction. POOH w/4 jts 21/6" tbg to 12,330'. CC: \$59,015.

4/12/96

POOH w/tbg, CO assy & 41/6" mill.

100# SIP. RIH w/28 jts tbg, tag fill @ 12,705', RU power swivel. CO from 12,705'-12,713' (8')/6 hrs drilling - hard drilling - possible metal. Rd swivel. POOH w/116 jts 27/6" tbg to 9313'. CO assy appeared to be plugged. CC: \$64,220.

4/13-14/96

No activity.

4/15/96

CO 5" liner.

100# SIP. POOH w/250 jts 2%" tbg, 70 jts 2%" tbg, CO assy & 4½" mill. Btm 2 jts were plugged w/metal shaving, scale, drilling mud & form. 4½"-mill was worn out. Pump out plugged jts @ sfc. RIH w/new 4½" mill, CO assy, 69 jts 2%" tbg & 312 jts 2½" tbg to 12,419'. CC: \$67,230.

4/16/96

POOH w/2%" tbg, CO ass & 416".

100# SIP. RIH w/21 jts 27%" tbg. Tag fill @ 12,713'. RU power swivel. CO from 12,713'-12,717'(4')/5 hrs. Hard drilling. CO assy acted plugged. RD swivel. POOH w/333 jts 27%" tbg to 2228'. CC: \$72,040.

4/17/96

CO 5" liner.

100# SIP. POOH w/69 jts 2%" tbg, CO assy & 41%" mill. Btm 2 jts & 41%" mill were plugged w/scale, mill was badly damaged. Pump 800 BFW @ 5 BPM, could not fill hole. RIH w/41%" rock bit, 19 jts 23%" tbg, CO assy, 50 jts 23%" tbg & 312 jts 23%" tbg to 12,417'. CC: \$78,340.

4/18/96

WOO.

0# SIP. RIH w/21 jts 2%" tbg, tag fill @ 12,717', RU power swivel. CO from 12,717'-12,725'(8'/3 hrs). CO assy acted plugged, RD swivel. POOH w/333 jts 2%" tbg, 69 jts 2%" tbg, CO assy & 4%" rock bit. Btm 2 jts & bit were plugged w/scale. Bit was locked up & cones flat on btm. Pump out plugged jts @ sfc. CC: \$43,040.

4/19/96

RIH w/21/s" tbg & try to est circ.

WOO. RIH w/70 jts 2%" tbg, POOH & LD same. PU & RIH w/4\%" drag bit & 75 jts 2\%" yellow bond tbg, cont to RIH w/329 jts 2\%" tbg. EOT @ 12,720'. Pump 50 bbls 8.4# mud, ingredient: 48 sx liquid csg, 1 sx caustic soda, 1 can PHPH, 1 gal xcide 207. Follow w/17.5 BW. Balance mud top @ 11,098', est FL @ 8100'. POOH w/21 jts 2\%" tbg to 12,359'. Pump 15 BW down csg. CC: \$88,840.

4/20-296

SDFWND - no activity.

4/22/96

Heat well w/250° water to clear tbg.

100# SIP. RIH w/21 jts 21/8" tbg. RU power swivel & strip head. Pump 536 BFW to est circ. Pump rate 9 BPM, est returns 3 BPM @ 600#. DO from 12,725'-12,735' (10')/1 hr. Tbg appeared to wax off. Very little fluid movement up tbg & heavy wax plugs @ sfc. RU hot oilers & heat csg w/300 BW @ 250°. Still could not est fluid movement in tbg. CC: \$92,950.

4/23/96

Cont to CO 5" liner.

Heat csg w/400 bbls of 250° water @ 2 BPM. W/rig pum, pump 200 BW @ 9 BPM to fill well. Pump 100 BW @ 8 BPM, mas psi 1200# down csg to clear tbg, were unable to clear tbg. RD power swivel. Pressure tbg to 5000#, still could not clear tbg. Swab down tbg. POOH w/304 jts 21/6" tbg & 41/6" drag bit. Drag bit & 10' of btm jt plugged w/scale. Clear bit & tbg. RIH w/same as pulled. Tag fill @ 12,735'. RU power swivel. Pump 550 BW to est circ, reverse circ @ 9 BPM, 3 BPM @ 6000# w/44% returns. DO from 12,735' to 13,102'(367')/12 hrs. Avg rate 30'/hr. CC: \$102,870.

HARTMAN #2-31A3 (STIMULATION WORKOVER) ALTAMONT FIELD DUCHESNE COUNTY, UT WI: 99.35959% COGUSA AFE:

4/24/96 Cont to RIH w/27/8" tbg.

Cont to CO 5" csg from 13,102'-13,120'(18')/10 hrs hard drilling. Heavy black shale in returns. Biggest pieces ½" in diameter. Pump rate 9 BPM @ 600#, 3½ BPM returns. Tbg plugged off @ bit & could not be cleared. RD swivel & strip head. Swab down tbg. POOH w/413 jts 2½" tbg & 4½" drag bit. Swabbing down tbg as needed. Drag bit & btm 3 jts plugged w/scale. Blades on drag bit were rounded & ½" under gauge. RIH w/4½" drag bit w/3-1½ ports & 210 jts 2½" tbg. EOT 6860'. CC: \$110,760.

4/25/96 CO 5" liner.

RIH w/203 jts 2%" tbg, tag fill @ 13,105' (last 15' of hole). RU power swivel & strip head. Pump 760 BW @ 9 BPM to est circ. 3 bbls returns @ 600#. DO from 13,105'-13,121'(16')/17 hrs. Large amount of black shale & sand stone in returns to sfc. Est fluid loss for 24 hrs 5400 bbls. CC: \$120,730.

4/26/96 WOO

Pump 9 BPM @ 600#, 3 BPM returns. DO from 13,121'-13,125'(4')/7 hrs hard drilling. Shale, frac balls in returns. DO from 13,125'-13,362'(237')/7 hrs drilling. W/EOT @ 13,362' returns drop to 1 BPM, pump rate 9 BPM @ 100#. Pump 350 bbls @ 9 BPM, could not increase circ. Pump 80 bbls down tbg to clear. RD power swivel. Pull out of 5' liner, EOT @ 12,345'. Est fluid loss for day 4600 bbls. CC: \$130,805.

4/27/96 Cont to POOH w/tbg & 41/8" drag bit.

Well on vac. Flush tbg w/70 BW, WOO. Call for liquid csg patch. FL @ 5928', RIH w/36 just 21/6" tbg. Tag fill @ 13,197', lost 165' of hole. Pump 30 bbls liquid csg & bit plugged. Fill csg & attempt to clar bit, could not. Swab liquid csg back to water truck. Cont to swab tbg down to 5500'. POOH w/155 jts 21/6" tbg to 8227'. CC: \$135,485.

4/28/96 WOO

0# SIP. POOH w/252 jts 27%" tbg & 41%" drag bit, blades on bit $\frac{1}{2}$ " under on each blade. Pulg worked clear, tbg on vac ofter last swab run. CC: \$136,915.

4/29/96 WOO

0# SIP. Evaluating lower Wasatch potential. CC; \$138,480.

4/30/96 Prep to set CICR to isolate damaged csg.

5/1/96 RU Halliburton.

0# SIP. RU Cutters Wireline. RIH w/5" cmt ret. Stack out @ 12,870'. POOH w/same. RIH w/sinker bars & 2½" spud head, did not tag tight spot @ 12,870'. Tag solid fill @ 13,100'. POOH. RIH w/5" cmt ret & set @ 12,870'. RD Cutters. RIH w/cmt ret stinger & 397 jts 2½" tbg. Sting into 5" cmt ret @ 12,570'. Pump 60 BW to est inj rate of 3.5 BPM @ 900#. CC: \$150,150.

5/2/96 RU Cutters.

0# SIP. RU Halliburton, est inj rate of 3 BPM @ 980#. Cmt from 12,870'-13,100' as follows: 20 BFW, 100 sx Class H cmt w/35% silica flour, wt 15.9#, yield 1.5, comp strength 3200# in 24 hrs & displace w/74.5 BW. Final inj rate 1 BPM @ 2000#. Pull out of ret w/95 sx below & 5 sx above ret. Rev circ until clean, ½ bbls cmt to sfc. Cmt top @ 12,860' (fill csg, 7 BPM to hold 100# on csg during job). RD Halliburton. POOH w/322 jts 21/6", LD 75 jts 21/6" workstring. CC: \$161,475.

5/3/96 CO to PU 3½" tbg.

0# SIP. RU Cutters WL. Perf well from 11,356'-12,841' w/316" & 4" csg guns, 3 SPF & 120° phasing.

Run 1: 12,468'-12,841', 20 ft, 60 holes, 0 psi, FL 7400'. Run 2: 12,206'-12,443', 20 ft, 60 holes, 0 psi, FL 7400'. Run 3: 11,935'-12,174', 20 ft, 60 holes, 0 psi, FL 7400'.

Run 4: 11,592'-11,917', 20 ft, 60 holes, 0 psi, FL 7400'.

Run 5: 11,356'-11,578', 15 ft, 45 holes, 0 psi, FL 7300'.

RD Cutters. PU & RIH w/7" HD pkr & 245 jts 3½" tbg, EOT @ 7610'. CC: \$182,060.

5/4/96 RU Dowell.

150# on tbg & csg. PU 124 jts 3½" N-80 tbg, set pkr @ 11,196' w/32,000# comp, pmpd 170 bblw treated prod water to fill, TP to 1500#, held. EOT @ 11,196'. CC: \$184,605.

5/5/96 No activity.

5/6/96 Check fluid level.

0 SIP. RU Dowell, acidize Wasatch perfs from 11,356'-12,481' w/9000 gals 15% HCL + additives. ATP 8500#, MTP 9000#, min rate 23 BPM, avg rate 27 BPM, max rate 33 BPM. ISIP 3895#, 5 min 2792#, 10 min 2309#, 15 min 2014#, diversion poor. Ttl load 654 bbls. RD Dkowell, flow back 17 BW. RU swab equip. IFL @ sfc. Made 23 runs, rec 219 BW, 14 BO/ $7\frac{1}{2}$ hrs. FFL 6500', pH 4.0, est fluid entry, 30 BPH. CC: \$215,620.

HARTMAN #2-31A3 (RECOMPLETE U WASATCH) ALTAMONT FIELD DUCHESNE COUNTY, UT WI: 99.35959% COGUSA AFE:

5/7/96	Check FL, LD 3½" tbg. 200# SITP. RU swab equip. IFL 5800'. Made 24 runs, rec 124 BW, 22 BO/9 hrs. FFL 7400'. Est fluid entry 14 BPH, pH 7.0, cut off acid worn sandline & pour new rope socket. CC: \$218,576.
5/8/96	ND BOP, NU Hydril. 400# on tbg, check FL @ 7000'. Rel 7" pkr @ 11,196', flush tbg w/60 BW. POOH & LD 368 jts 3½" N-80 tbg & 7" pkr. RU 2½" tbg equip. Raise working floor. CC: \$222,245.
5/9/96	RD. 0# SIT, ND BOP, NU Hydril. PU centrilift ESP assy, RIH w/same & 344 jts 27%" tbg. Bonding #4 lead cable to side w/3 bonds per jt. ND Hydril. Splice on top connect. Land on well w/collar stop in tbg @ 9750'. SN @ 11,180'. Drain sub @ 11,213', pump top @ 11,254', pump btm @ 11,313'. Connect to control box & engage pump. Well pumped up in 95 min. Place well on pump @ 5:30 pm. Return to prod. Note: pump set @ 55 hertz. CC: \$258,870. Pmpd 0 BO, 223 BW, 27 MCF, 55 HTZ, 15 hrs.
5/10/96	On production. RD, PU & clean up location. Pmpd 0 BO, 434 BW, 42 MCF, 24 hrs, 55 HZ, PIP 745#.
5/11/96	Pmpd 29 BO, 389 BW, 45 MCF, 24 hrs, 55 HZ, PIP 645#.
5/12/96	Pmpd 39 BO, 348 BW, 40 MCF, 24 hrs, 55 HZ, PIP 595#. Check FL @ 7800' (pump @ 11,149').
5/13/96	Pmpd 38 BO, 345 BW, 45 MCF, 55 HZ, 24 hrs, PIP 500#. Check FL @ 7600' (pump @ 11,149').
5/14/96	Pmpd 33 BO, 191 BW, 45 MCF, 55 HZ, 24 hrs, PIP 500#. Will check FL 5/15/96.
5/15/96	Pmpd 36 BO, 309 BW, 53 MCF, 24 hrs, 55 HZ, PIP 490#. Check FL @ 8200' (ESP @ 11,254').
5/16/96	Pmpd 33 BO, 191 BW & 45 MCF/24 hrs, 30 psi, PIP 500#.
5/17/96	SDFN.
5/18/96	Pmpd 41 BO, 305 BW & 55 MCF/24 hrs, PIP 405#.
5/19/96	Pmpd 40 BO, 293 BW & 54 MCF/24 hrs, PIP 380#.
5/20/96	Pmpd 40 BO, 288 BW & 55 MCF/24 hrs, PIP 360#.
5/21/96	Pmpd 52 BO, 281 BW & 55 MCF/24 hrs, PIP 317#.
5/22/96	Pmpd 32 BO, 290 BW, 55 MCF/24 hrs.

Pmpd 36 BO, 298 BW, 55 MCF, 24 hrs.
Prior prod: 0 BO, 0 BW, 0 MCF. FINAL REPORT

5/23/96

	5. Lease Designation and Serial Number:
SUNDRY NOTICES AND REPORTS O	N WELLS 6. If Indian, Allottee or Tribe Name: N/A
Do not use this form for proposals to drill new wells, deepen existing wells, or to reented Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for su	
1. Type of Well: OIL \overline{X} GAS OTHER:	8. Well Name and Number: Hartman #2-31A3
Name of Operator: Coastal Oil & Gas Corporation	9. API Well Number: 43-013-31243
3. Address and Telephone Number: P.O. Box 749, Denver, CO 80201-0749	(303) 573-4455 10. Field and Pool, or Wildcat: Altamont
4. Location of Well	
Footages: 2437' FSL & 1505' FWL	County: Duchesne
QQ, Sec., T., R., M.: SWSW Section 31-T1S-R3W	State: Utah
11. CHECK APPROPRIATE BOXES TO INDICAT	E NATURE OF NOTICE, REPORT, OR OTHER DATA
NOTICE OF INTENT (Submit in Duplicate)	SUBSEQUENT REPORT (Submit Original Form Only)
Abandon	Abandon * New Construction Repair Casing Pull or Alter Casing Change of Plans Perforate Convert to Injection Vent or Flare Fracture Treat or Acidize Water Shut-Off Other Rod Pump Conversion Date of work completion 8/7/96 Report results of Multiple Completions and Recompletions to different reservoirs on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form. * Must be accompanied by a cement verification report.
Please see the attached chronological history for work performed of	DECEIVED AUG 2 6 1996 DIV. OF OIL, GAS & MINING
Name & Signature: Shila Zoverner	Sheila Bremer Title Environmental & Safety Analyst Date 08/22/96

(This space for State use only)

COASTAL OIL & GAS CORPORATION CHRONOLOGICAL HISTORY

HARTMAN #2-31A3 (ROD PUMP CONVERSON) ALTAMONT FIELD DUCHESNE COUNTY, UT WI: 99.0% COGUSA AFE: 26444/26445 TD: 14,595' PBTD: 14,530' 5" LINER @ 12,453'-14,476' PERFS: 12,460'-14,476' CWC(M\$): (-23.0)

8/3/96 Cont POOH w/submersible pump.

MIRU workover rig. Wait on BOP equip. ND WH. NU Hydrill. CC: \$3463.

8/4/96 PU rods, RIH w/1½" pump.

EOT @ 5634'. Finish POOH & LD central lift pump. RIH w/21/6" prod tbg. Set 7" TAC @ 11,302' w/25,000#, SN

@ 11,188'. ND BOP. NU WH. CC: \$9053.

8/5/96 RD, well on production.

Remove thread prot & clean rd pins. PU & RIH w/11/2" pump & rods. Space out & seat pump @ 11,188'. Fill tbg

w/45 bbls treated prod water, test to 500#, ok. RD. Place on pump. CC: \$11,891. (-\$23.0)

Pmpd 48 BO, 91 BW, 18 MCF, 8.5 SPM, 10 hrs.

8/6/96 On production.

Pmpd 32 BO, 284 BW, 35 MCF, 8.5 SPM, 24 hrs.

8/7/96 Pmpd 53 BO, 269 BW, 34 MCF, 8.5 SPM, 24 hrs.

Prior Prod: 0 BO, 0 BW, 0 MCF.

Final Report.

State of Delaware

PAGE 1

Office of the Secretary of State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AMENDMENT OF "COASTAL OIL & GAS CORPORATION", CHANGING ITS NAME FROM "COASTAL OIL & GAS CORPORATION" TO "EL PASO PRODUCTION OIL & GAS COMPANY", FILED IN THIS OFFICE ON THE NINTH DAY OF MARCH, A.D. 2001, AT 11 O'CLOCK A.M.



JUN 19 2001

DIVISION OF OIL, GAS AND MINING



Darriet Smith Windson, Secretary of State

AUTHENTICATION: 1061007

DATE: 04-03-01

0610204 8100

010162788

CERTIFICATE OF AMENDMENT

OF

CERTIFICATE OF INCORPORATION

COASTAL OIL & GAS CORPORATION (the "Company"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, DOES HEREBY CERTIFY:

FIRST: That the Board of Directors of the Company, by the unanimous written consent of its members, filed with the minutes of the Board, adopted a resolution proposing and declaring advisable the following amendment to the Certificate of Incorporation of the Company:

RESOLVED that it is deemed advisable that the Certificate of Incorporation of this Company be amended, and that said Certificate of Incorporation be so amended, by changing the Article thereof numbered "FIRST." so that, as amended, said Article shall be and read as follows:

"FIRST. The name of the corporation is El Paso Production Oil & Gas Company."

SECOND: That in lieu of a meeting and vote of stockholders, the stockholders entitled to vote have given unanimous written consent to said amendment in accordance with the provisions of Section 228 of the General Corporation Law of the State of Delaware.

THIRD: That the aforesaid amendment was duly adopted in accordance with the applicable provisions of Sections 242 and 228 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, said COASTAL OIL & GAS CORPORATION has caused this certificate to be signed on its behalf by a Vice President and attested by an Assistant Secretary, this 9th day of March 2001.

COASTAL OIL & GAS CORPORATION

David L. Siddal

Vice President

Attest:

Margaret E. Roark, Assistant Secretary

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 11:00 AM 03/09/2001

010118394 - 0610204

JUN 19 2001

DIVISION OF OIL, GAS AND MINING

Division of Oil, Gas and Mining

OPERATOR CHANGE WORKSHEET

ROUTING

06/19/2001

06/19/2001

608186-0143

06/21/2001

ROUTHIO	
1. GLH	4-KAS
2. CDW 🗸	5-LP i
3. JLT	6-FILE

Enter date after each listed item is completed

Change of Operator (Well Sold)

Designation of Agent

Operator Name Change (Only)

OPERATOR CHANGES DOCUMENTATION

4. Is the new operator registered in the State of Utah:

(R649-8-10) Sundry or legal documentation was received from the **FORMER** operator on:

The new company has been checked through the Department of Commerce, Division of Corporations Database on:

YES

Business Number:

(R649-8-10) Sundry or legal documentation was received from the NEW operator on:

X Merger

The operator of the well(s) listed belo	w has changed, effective:	3-09-200	01	_		
FROM: (Old Operator):		TO: (Ne	ew Operator):			
COASTAL OIL & GAS CORPORATION		EL PASO	PRODUCTIO	N OIL & C	AS COMI	PANY
Address: 9 GREENWAY PLAZA STE 2721		Address:	9 GREENWA	AY PLAZA	STE 2721	RM 2975E
HOUSTON, TX 77046-0995		HOUSTO	N, TX 77046-0	0995		
Phone: 1-(713)-418-4635		Phone:	1-(832)-676-4			
Account N0230		Account	N1845			
<u></u>	CA No.	Unit:				<u> </u>
WELL(S)				·		
	API		SEC TWN	LEASE	WELL	WELL
NAME	NO	NO	RNG	TYPE	TYPE	STATUS
MONSEN 3-27A3	43-013-31401	11686		FEE	OW	P
WINKLER 1-28A3	43-013-30191	1750		FEE	OW	P
WINKLER 2-28A3	43-013-31109	1751	28-01S-03W	FEE	OW	P
HANSON TRUST 2-29A3	43-013-31043	10205	4	FEE	OW	P
STEVENSON 3-29A3	43-013-31376	11442	1	FEE	OW	P
DASTRUP 2-30A3	43-013-31320	11253		FEE	OW	P
B HARTMAN U 1-31A3	43-013-30093	5725		FEE	OW	S
HARTMAN 2-31A3	43-013-31243	11026		FEE	OW	P
HANSON TRUST 2-32A3	43-013-31072	1641	32-01S-03W	FEE_	OW	P
POWELL 1-33A3	43-013-30105	1625	33-01S-03W	FEE	OW	P
POWELL 2-33A3	43-013-30704	2400	33-01S-03W	FEE	OW	P
REMINGTON 1-34A3	43-013-30139	1725	34-01S-03W	FEE	OW	P
REMINGTON 2-34A3	43-013-31091	1736	34-01S-03W	FEE	OW	P
JACOBSEN 2-12A4	43-013-30985	10313	12-01S-04W	FEE	OW	S
JESSEN 1-15A4	43-013-30817	9345	15-01S-04W	FEE	ow	P
FISHER 1-16A4	43-013-30737	9117	16-01S-04W	FEE	OW	P
JESSEN 1-17A4	43-013-30173	4725	17-01S-04W	FEE	OW	P
JESSEN 2-21A4	43-013-31256	11061	21-01S-04W	FEE	OW	P
CR AMES 1-23A4	43-013-30375	5675		FEE	OW	S
GOODRICH 1-24A4	43-013-30760	9136	24-01S-04W	FEE	OW	P

If NO , the operator was contacted contacted on: N/A
Federal and Indian Lease Wells: The BLM and or the BIA has approved the (merger, name change, or operator change for all wells listed on Federal or Indian leases on: N/A
Federal and Indian Units: The BLM or BIA has approved the successor of unit operator for wells listed on: N/A
Federal and Indian Communization Agreements ("CA"): The BLM or the BIA has approved the operator change for all wells listed involved in a CA on: N/A
Underground Injection Control ("UIC") The Division has approved UIC Form 5, Transfer of Authority to Inject, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: N/A
ATA ENTRY: Changes entered in the Oil and Gas Database on: 06/27/2001
Changes have been entered on the Monthly Operator Change Spread Sheet on: 06/27/2001
Bond information entered in RBDMS on: 06/20/2001
Fee wells attached to bond in RBDMS on: 06/27/2001
State well(s) covered by Bond No.: N/A
EE WELLS - BOND VERIFICATION/LEASE INTEREST OWNER NOTIFICATION:
(R649-3-1) The NEW operator of any fee well(s) listed has furnished a bond: 400JU0708
The FORMER operator has requested a release of liability from their bond on: The Division sent response by letter on: OMPLETION OF OPERATOR CHANGE N/A
(R649-2-10) The FORMER operator of the Fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: COMPLETION OF OPERATOR CHANGE
LMING: All attachments to this form have been MICROFILMED on: 8/15/01
LING: ORIGINALS/COPIES of all attachments pertaining to each individual well have been filled in each well file on:
MMENTS: Master list of all wells involved in operator change from Coastal Oil & Gas Corporation to El Paso
oduction Oil and Gas Company shall be retained in the "Operator Change File".

FORM 9

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING 5. LEASE DESIGNATION AND SERIAL NUMBER: FEE 6. IF INDIAN, ALLOTTEE OR TRIBE NAME: SUNDRY NOTICES AND REPORTS ON WELLS 7. UNIT or CA AGREEMENT NAME: Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals. 1. TYPE OF WELL 8. WELL NAME and NUMBER: OIL WELL 🔽 GAS WELL OTHER HARTMAN 2-31A3 2. NAME OF OPERATOR: 9. API NUMBER: EL PASO E&P COMPANY, L.P. 4301331243 3. ADDRESS OF OPERATOR: PHONE NUMBER: 10. FIELD AND POOL, OR WILDCAT: CITY DENVER 1099 18TH ST, STE 1900 715 80202 STATE CO (303) 291-6400 **ALTAMONT** 4. LOCATION OF WELL FOOTAGES AT SURFACE: 2437' FSL, 1505' FWL. COUNTY: DUCHESNE QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: NESW 31 18 3W STATE: **UTAH**

TYPE OF SUBMISSION		TYPE OF ACTION	
NOTICE OF INTENT	ACIDIZE	DEEPEN	REPERFORATE CURRENT FORMATION
(Submit in Duplicate)	ALTER CASING	FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start:	CASING REPAIR	NEW CONSTRUCTION	TEMPORARILY ABANDON
	CHANGE TO PREVIOUS PLANS	OPERATOR CHANGE	TUBING REPAIR
	CHANGE TUBING	PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT (Submit Original Form Only)	CHANGE WELL NAME	PLUG BACK	WATER DISPOSAL
Date of work completion:	CHANGE WELL STATUS	PRODUCTION (START/RESUME)	WATER SHUT-OFF
·	COMMINGLE PRODUCING FORMATIONS	RECLAMATION OF WELL SITE	OTHER:
2/19/2008	CONVERT WELL TYPE	RECOMPLETE - DIFFERENT FORMATION	

OPERATOR PERFORMED THE FOLLOWING WORK ON THE SUBJECT WELL BETWEEN 1/28/2008 AND 2/19/2008:

1/28/2008: TOOH W/ RODS AND TBG. RIH W/ CIBP @ 11285'. DUMP BAIL 25' CMT ON PLUG. PRESS TEST CSG W/ PKR. RIH W/ CIBP @ 11260'. DUMP 20' CMT ON PLUG. PRESS TEST CSG TO 1000 PSI, OK.

2/7/2008: PERFORATE FROM 11220' - 10692' W/ 3-1/8" HSC GUNS, 120 DEG PHASING, 22.7 GRAM CHARGES. RIH W/ TBG AND PKR @ 9438'.

ACIDIZE PERFS W/ 5000 GAL 15% HCL ACID AND 220 BIO BALLS. FRAC W/ 2826 GAL PAD, 13970 GAL .50 100 MESH, 2043 GAL SPACER, 12024 GAL W/ 1LB 20/40 CARBOPROP, 14043 GAL 1.96LB CARBOPROP, 16021 GAL 2.99LB CARBOPROB, 10086 GAL 3.99LB CARBOPROP.

2/12/2008: RELEASE PKR. TAG CMT ON TOP OF CIBP @ 11242'. CICR WELL CLEAN. TIH W/ 2-7/8" PROD TBG. SET TAC @ 9203' IN 25K TENSION. EOT @ 9551'. RIH W/ RODS. PRESS TEST TO 1000 PSI, OK. STROKE TEST PUMP.

RETURN WELL TO PRODUCTION.

NAME (PLEASE PRINT) LISA PRETZ	TITLE	ENGINEERING TECH
SIGNATURE Jun / nu	DATE	3/12/2008

(This space for State use only)

RECEIVED MAR 17 2008

^{12.} DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Division of Oil, Gas and Mining OPERATOR CHANGE WORKSHEET (for state use only)

ROUTING	
CDW	

X - Change of Operator (Well Sold) The operator of the well(s) listed below has changed, effective:			Operator Name Change/Merger						
				6/1/2012					
FROM: (Old Operator):				TO: (New Or	perator):				
N3065- El Paso E&P Company, L.P.				N3850- EP Ene		ompany, L.P.			
1001 Louisiana Street				1001 Louisiana		, , , , , ,			
Houston, TX. 77002				Houston, TX. 7					
]				,					
Phone: 1 (713) 997-5038				Phone: 1 (713)	997-5038				
CA No.				Unit:	T	N/A		<u>-</u>	
WELL NAME	SEC	TWN R	NG	API NO	ENTITY NO	LEASE TYPE	WELL TYPE	WELL STATUS	
See Attached List					<u> </u>	<u> </u>			
OPERATOR CHANGES DOCUMENT Enter date after each listed item is completed 1. (R649-8-10) Sundry or legal documentation wa 2. (R649-8-10) Sundry or legal documentation wa 3. The new company was checked on the Depart 4a. Is the new operator registered in the State of U 5a. (R649-9-2) Waste Management Plan has been re 5b. Inspections of LA PA state/fee well sites comp 5c. Reports current for Production/Disposition & S	as recoment Jtah: eccive	eived from eived from of Comme ed on:	the	NEW operator	on: orporations	6/25/2012 6/25/2012 Database on: 2114377-0181		6/27/2012	
6. Federal and Indian Lease Wells: The BL			IA h		- e merger, na	me change.			
or operator change for all wells listed on Feder					BLM	N/A	BIA	Not Received	
7. Federal and Indian Units:						-			
The BLM or BIA has approved the successor	r of m	nit operato	r for	wells listed on		N/A			
					•	- IVA	•		
_		-				N/A			
The BLM or BIA has approved the operator					Comm 5 Tron				
9. Underground Injection Control ("UIC"			_	_				C1	
Inject, for the enhanced/secondary recovery ur	nit/pro	oject for th	ie wa	iter disposal we	il(s) listed o	n: Sec	cond Oper	Cng	
DATA ENTRY:									
1. Changes entered in the Oil and Gas Database			_	6/29/2012	_				
2. Changes have been entered on the Monthly O	perat	or Chang	e Sp			6/29/2012	•		
3. Bond information entered in RBDMS on:				6/29/2012	_				
4. Fee/State wells attached to bond in RBDMS or				6/29/2012	_				
5. Injection Projects to new operator in RBDMS		DD 0.1		6/29/2012	-				
6. Receipt of Acceptance of Drilling Procedures i	or Al	PD/New of	n:		N/A	_			
BOND VERIFICATION:									
1. Federal well(s) covered by Bond Number:				103601420	_				
2. Indian well(s) covered by Bond Number:	_			103601473		4007770707			
3a. (R649-3-1) The NEW operator of any state/fe	e wel	ll(s) listed	cov	ered by Bond N	umber	400JU0705	-		
3b. The FORMER operator has requested a releas	se of l	iability fro	om tl	neir bond on:	N/A				
LEASE INTEREST OWNER NOTIFIC 4. (R649-2-10) The NEW operator of the fee wells	s has l	been conta							
of their responsibility to notify all interest owne	rs of	this chang	e on	•	6/29/2012				
COMMENTS:									
Disposal and Injections wells will be moved wh	ien U	IC 5 is re	ceiv	ed.					

STATE OF UTAH PARTMENT OF NATURAL RESOURCES

						NUMBER:
CUNDDY	/ NOTICES AN	ID BEDODI	TO ON WEL	1.6	<u> </u>	ME:
SUNDKI	r NOTICES AF	ND REPUR	12 ON WEL	LS	7 LINUT CA ACREEMENT NAME.	
Do not use this form for proposals to drill r drill horizontal k	new wells, significantly deepe aterals. Use APPLICATION	en existing wells below o	current bottom-hole dept L form for such proposa	th, reenter plugged wells, or to is.	7. UNIT OF CA AGREEMENT NAME:	
1. TYPE OF WELL OIL WELL	☑ GAS WELI	OTHER			8. WELL NAME and NUMBER:	
2. INMIE'OF OPERATOR: EI PASO E&P Company, L.P. Attn: Maria Gomez EI Paso E&P Company, L.P. Additional Properties of Part of Past Annual Properties		<u> </u>				
	P.	A	Attn: Maria Go	···-		
	- Houston	STATE TX 7	77002			
		0.771 <u>g</u>				
FOOTAGES AT SURFACE: See A	Attached				COUNTY:	
QTR/QTR, SECTION, TOWNSHIP, RAN	NGE, MERIDIAN:					
11. CHECK APP	ROPRIATE BOXI	ES TO INDICA	TE NATURE	OF NOTICE, REPO	ORT, OR OTHER DATA	
TYPE OF SUBMISSION			T	YPE OF ACTION		
NOTICE OF INTENT	ACIDIZE		DEEPEN		REPERFORATE CURRENT FO	PRMATION
(Submit in Duplicate)			FRACTURE	TREAT		L
Approximate date work will start:	1二					
		VIOUS PLANS				
CHRSEOHENT REPORT	1=	A B4E				
	1=		_		=	
Date of work completion:			=			
			=		Nomo/Onoro	tor
12. DESCRIBE PROPOSED OR CO	OMPLETED OPERATIO	NS. Clearly show al	l pertinent details inc	cluding dates, depths, volum	mes, etc.	
						anv. L.P.
(new Operator) effective .						
ED E	D :	المطافعة المسامعة		ditions of the lease	(a) fan tha an antiona aond.	ام مغم
4 .	_			1		
1/2 A.11	2			Luci	2/10	
- O Jour July				Frank W. Falleri		
, , , , , , , , , , , , , , , , , , , ,						
El Paso E&P Company, L	P.			EP Energy E&P C	company, L.P.	
						
NAME (PLEASE PRINT) Maria S. (Gomez		TITU	Principal Regula	atory Analyst	
SIGNATURE MAYA	H. Borrer	S	DAYI	6/22/2012		
This space for State use only)				RE	CEIVED	
APPROVED _	, /29/201	2			. 2 5 2012	
7	حر غنب عدلا			JUN	2 5 2012	

Division of Oil, Gas and Mining

Earlene Russell, Engineering Technician

Rachel Medim

(See Instructions on Reverse Side)

DIV. OF OIL, GAS & MINING

							Well	Well	
Well Name	Sec	TWP	RNG	API Number	Entity	Lease Type	Type	Status	Conf
DWR 3-17C6	17	0308	060W	4301350070		14204621118	OW	APD	С
LAKEWOOD ESTATES 3-33C6	33	0308	060W	4301350127		1420H621328	OW	APD	С
YOUNG 3-15A3	15	I		4301350122		FEE	OW	APD	С
WHITING 4-1A2	01			4301350424		Fee	OW	APD	С
EL PASO 4-34A4	34			4301350720		Fee	ow	APD	C
YOUNG 2-2B1	02			4304751180		FEE	ow	APD	C
LAKE FORK RANCH 3-10B4	10			4301350712	19221		OW	DRL	C
LAKE FORK RANCH 4-26B4	26			4301350712			OW	DRL	C
							OW	DRL	C
LAKE FORK RANCH 4-24B4	24	1		4301350717					
Cook 4-14B3	14			4301351162			OW	DRL	C
Peterson 4-22C6	22			4301351163			OW	DRL	С
Lake Fork Ranch 4-14B4	14			4301351240			OW	DRL	С
Melesco 4-20C6	20			4301351241			OW	DRL	С
Peck 3-13B5	13			4301351364			OW	DRL	С
Jensen 2-9C4	09			4301351375			OW	DRL	С
El Paso 3-5C4	05	030S	040W	4301351376	18563	Fee	OW	DRL	С
ULT 6-31	31	030S	020E	4304740033		FEE	OW	LA	
OBERHANSLY 2-2A1	02	0108	010W	4304740164		FEE	OW	LA	
DWR 3-15C6	15			4301351433		14-20-H62-4724		NEW	С
Lake Fork Ranch 5-23B4	23			4301350739		Fee	ow	NEW	
Duchesne Land 4-10C5	10			4301351262		Fee	OW	NEW	С
Cabinland 4-9B3	09			4301351374		Fee	OW	NEW	C
			<u> </u>	4301351374		Fee	OW	NEW	C
Layton 4-2B3	02								C
Golinski 4-24B5	24			4301351404		Fee	OW	NEW	
Alba 1-21C4	21			4301351460		Fee	OW	NEW	С
Allison 4-19C5	19			4301351466		Fee	OW	NEW	С
Seeley 4-3B3	03			4301351486		Fee	OW	NEW	С
Allen 4-25B5	25			4301351487		Fee	OW	NEW	С
Hewett 2-6C4	06	030S	040W	4301351489		Fee	OW	NEW	С
Young 2-7C4	07	0308	040W	4301351500		Fee	OW	NEW	С
Brighton 3-31A1E	31	0108	010E	4304752471		Fee	OW	NEW	С
Hamaker 3-25A1	25			4304752491		Fee	OW	NEW	С
Bolton 3-29A1E	29			4304752871		Fee	OW	NEW	С
HORROCKS 5-20A1	20			4301334280	17378		OW	OPS	C
DWR 3-19C6	19					14-20-462-1120		P	
						14-20-462-1131		P	
DWR 3-22C6						14-20-462-1323		P	
DWR 3-28C6								P	+
UTE 1-7A2						14-20-462-811	OW		
UTE 2-17C6	17	I				14-20-H62-1118		P	
WLR TRIBAL 2-19C6	19	L		1		14-20-H62-1120		Р	
CEDAR RIM 10-A-15C6	15					14-20-H62-1128		Р	
CEDAR RIM 12A	28	0308	060W	4301331173	10672	14-20-H62-1323	OW	Р	
UTE-FEE 2-33C6	33	030S	060W	4301331123	10365	14-20-H62-1328	OW	Р	
TAYLOR 3-34C6	34	0308	060W	4301350200	17572	1420H621329	OW	P	
BAKER UTE 2-34C6	34					14-20-H62-1329	OW	Р	
UTE 3-35Z2 K						14-20-H62-1614		Р	1
UTE 1-32Z2	32					14-20-H62-1702		Р	
UTE TRIBAL 1-33Z2	33			4301330334		14-20-H62-1703		P	+
						14-20-H62-1703		P	
UTE 2-33Z2								P	
UTE TRIBAL 2-34Z2	34	4		<u> </u>		14-20-H62-1704			+
LAKE FORK RANCH 3-13B4	13					14-20-H62-1743		P	
UTE 1-28B4	28			4301330242		14-20-H62-1745		P	<u> </u>
UTE 1-34A4	34	·		4301330076		14-20-H62-1774		Р	
	26	0108	04010	4301330069	1580	14-20-H62-1793	OW	Р	
UTE 1-36A4	36	0103	OTOVV	730 1330003	1000	11 LO 1102 1700	<u> </u>		
UTE 1-36A4 UTE 1-1B4	01			4301330129		14-20-H62-1798		P	

LITE 4 OFAO	25	0400	02014	4204220270	1000	44 00 HG2 4902	OVA	Р	
UTE 1-25A3 UTE 2-25A3	25 25			4301330370		14-20-H62-1802 14-20-H62-1802	<u> </u>	P	
UTE 1-26A3	26	 		4301331343		14-20-H62-1803	}	P	
UTE 2-26A3	26					14-20-H62-1803		P	
UTE TRIBAL 4-35A3		1	1			1420H621804	OW	Р	С
	35			L	i	14-20-H62-1804		P	<u></u>
UTE 2-35A3	35								
UTE 3-35A3	35					14-20-H62-1804		Р	ļ
UTE 1-6B2	06			4301330349		14-20-H62-1807		P	
UTE 2-6B2	06					14-20-H62-1807		P	
UTE TRIBAL 3-6B2	06					14-20-H62-1807		Р	С
POWELL 4-19A1	19			4301330071		14-20-H62-1847		Р	ļ
COLTHARP 1-27Z1	27			4301330151		14-20-H62-1933		P	
UTE 1-8A1E	08		L	4304730173		14-20-H62-2147		Р	
UTE TRIBE 1-31	31			4301330278		14-20-H62-2421		Ρ	ļ
UTE 1-28B6X	28					14-20-H62-2492		Р	
RINKER 2-21B5	21					14-20-H62-2508		Р	
MURDOCK 2-34B5	34					14-20-H62-2511		Р	
UTE 1-35B6	35			4301330507		14-20-H62-2531		Р	
UTE TRIBAL 1-17A1E	17	1 -		4304730829	1	14-20-H62-2658		Р	
UTE 2-17A1E	17	0108	010E	4304737831	16709	14-20-H62-2658	OW	Р	
UTE TRIBAL 1-27A1E	27	0108	010E	4304730421	800	14-20-H62-2662	OW	Р	
UTE TRIBAL 1-35A1E	35	0108	010E	4304730286	795	14-20-H62-2665	OW	P	
UTE TRIBAL 1-15A1E	15	0108	010E	4304730820	850	14-20-H62-2717	OW	Р	ļ ·
UTE TRIBAL P-3B1E	03			4304730190		14-20-H62-2873		Р	
UTE TRIBAL 1-22A1E	22			4304730429		14-20-H62-3103		Р	ļ
B H UTE 1-35C6	35					14-20-H62-3436		Р	<u> </u>
BH UTE 2-35C6	35					14-20-H62-3436		Р	<u></u>
MCFARLANE 1-4D6	04					14-20-H62-3452		Р	†
UTE TRIBAL 1-11D6	11			4301330482		14-20-H62-3454		P	
CARSON 2-36A1	36			4304731407	4	14-20-H62-3806		P	
UTE 2-14C6	14			4301330775		14-20-H62-3809	+	P	
DWR 3-14C6	14				1	14-20-H62-3809		P	
THE PERFECT "10" 1-10A1	10		L	4301330935		14-20-H62-3855		P	
BADGER-SAM H U MONGUS 1-15A1	15			4301330949		14-20-H62-3860		P	
MAXIMILLIAN-UTE 14-1	14			4301330726		14-20-H62-3868		<u>.</u> Р	-
FRED BASSETT 1-22A1	22			4301330781		14-20-H62-3880	1	P	t
UTE TRIBAL 1-30Z1	30					14-20-H62-3910		P	
UTE LB 1-13A3	13			4301330894		14-20-H62-3980		P	
	22					14-20-H62-4614		P	ļ
UTE 2-22B6 UINTA OURAY 1-1A3						14-20-H62-4664		P	
	01					14-20-H62-4752		P	<u> </u>
UTE 1-6D6	06					1420H624801		P	
UTE 2-11D6	11			ļ			OW		
UTE 1-15D6	15					14-20-H62-4824		P	<u> </u>
UTE 2-15D6	15					14-20-H62-4824		P	
HILL 3-24C6	24					1420H624866	OW	Р	С
BARCLAY UTE 2-24C6R	24			L		14-20-H62-4866		P	
BROTHERSON 1-2B4	02			4301330062		FEE	OW	P	ļ
BOREN 1-24A2	24			4301330084		FEE	OW	Р	
FARNSWORTH 1-13B5	13			4301330092		FEE	OW	Р	
BROADHEAD 1-21B6	21			4301330100		FEE	OW	P	
ASAY E J 1-20A1	20	- 		4301330102		FEE	OW	Р	ļ
HANSON TRUST 1-5B3	05			4301330109		FEE	OW	P	
ELLSWORTH 1-8B4	08			4301330112		FEE	OW	Р	L
ELLSWORTH 1-9B4	09			4301330118		FEE	OW	Р	
ELLSWORTH 1-17B4	17			4301330126		FEE	OW	Р	
CHANDLER 1-5B4	05	0208	040W	4301330140	1685	FEE	OW	Р	
HANSON 1-32A3	32	0108	030W	4301330141	1640	FEE	OW	Р	
JESSEN 1-17A4	17			4301330173		FEE	OW	P	T

LIENIKINO 4 4DO	04	0200	020\4/	4204220475	4700	ree	OW	Р
JENKINS 1-1B3	01	<u> </u>		4301330175	I	FEE FEE	OW	P
GOODRICH 1-2B3	02			4301330182	<u> </u>	FEE	OW	P
ELLSWORTH 1-19B4	19			4301330183			OW	P
DOYLE 1-10B3	10			4301330187		FEE		P
JOS. SMITH 1-17C5	17			4301330188		FEE	OW	
RUDY 1-11B3	11			4301330204		FEE	OW	P
CROOK 1-6B4	06			4301330213		FEE	OW	P
HUNT 1-21B4	21			4301330214		FEE	OW	P
LAWRENCE 1-30B4	30			4301330220	1	FEE	OW	P
YOUNG 1-29B4	29			4301330246		FEE	OW	P
GRIFFITHS 1-33B4	33	1		4301330288		FEE	OW	P
POTTER 1-2B5	02	h		4301330293		FEE	OW	P
BROTHERSON 1-26B4	26			4301330336		FEE	OW	P
SADIE BLANK 1-33Z1	33			4301330355		FEE	OW	Р
POTTER 1-24B5	24	I		4301330356		FEE	OW	P
WHITEHEAD 1-22A3	22			4301330357		FEE	OW	Р
CHASEL MILLER 2-1A2	01	1	L	4301330360		FEE	OW	P
ELDER 1-13B2	13			4301330366	<u> </u>	FEE	OW	P
BROTHERSON 2-10B4	10			4301330443		FEE	OW	Р
FARNSWORTH 2-7B4	07	t		4301330470		FEE	OW	Р
TEW 1-15A3	15			4301330529		FEE	OW	Р
UTE FEE 2-20C5	20			4301330550	L	FEE	OW	P
HOUSTON 1-34Z1	34			4301330566		FEE	OW	Р
GALLOWAY 1-18B1	18			4301330575		FEE	OW	Р
SMITH 1-31B5	31	1		4301330577		FEE	OW	P
LEBEAU 1-34A1	34			4301330590		FEE	OW	Р
LINMAR 1-19B2	19	020S	020W	4301330600	9350	FEE	OW	Р
WISSE 1-28Z1	28	010N	010W	4301330609	905	FEE	OW	Р
POWELL 1-21B1	21	0208	010W	4301330621	910	FEE	OW	Р
HANSEN 1-24B3	24	0208	030W	4301330629	2390	FEE	OW	P
OMAN 2-4B4	04	0208	040W	4301330645	9125	FEE	OW	P
DYE 1-25Z2	25			4301330659		FEE	OW	Р
H MARTIN 1-21Z1	21	010N	010W	4301330707	925	FEE	OW	Р
JENSEN 1-29Z1	29	010N	010W	4301330725	9110	FEE	OW	Р
CHASEL 2-17A1 V	17	010S	010W	4301330732	9112	FEE	OW	Р
BIRCHELL 1-27A1	27			4301330758		FEE	OW	Р
CHRISTENSEN 2-8B3	08	0208	030W	4301330780	9355	FEE	OW	Р
LAMICQ 2-5B2	05	0208	020W	4301330784	2302	FEE	OW	Р
BROTHERSON 2-14B4	14	0208	040W	4301330815	10450	FEE	OW	Р
MURRAY 3-2A2	02	010S	020W	4301330816	9620	FEE	OW	Р
HORROCKS 2-20A1 V	20	0108	010W	4301330833	8301	FEE	OW	Р
BROTHERSON 2-2B4	02	0208	040W	4301330855	8420	FEE	OW	P
ELLSWORTH 2-8B4	08	L	L	4301330898		FEE	OW	Р
OMAN 2-32A4	32	010S	040W	4301330904	10045	FEE	OW	Р
BELCHER 2-33B4	33	0208	040W	4301330907	9865	FEE	OW	Р
BROTHERSON 2-35B5	35	0208	050W	4301330908	9404	FEE	OW	P
HORROCKS 2-4A1 T	04	010S	010W	4301330954	9855	FEE	OW	Р
JENSEN 2-29A5	29	010S	050W	4301330974	10040	FEE	OW	P
UTE 2-34A4	34	010S	040W	4301330978	10070	FEE	OW	P
CHANDLER 2-5B4	05			4301331000			OW	P
BABCOCK 2-12B4	12	0208	040W	4301331005	10215	FEE	OW	Р
BADGER MR BOOM BOOM 2-29A1	29	0108	010W	4301331013	9463	FEE	OW	Р
BLEAZARD 2-18B4	18	020\$	040W	4301331025	1566	FEE	OW	P
BROADHEAD 2-32B5	32	020S	050W	4301331036	10216	FEE	OW	P
ELLSWORTH 2-16B4	16			4301331046			OW	P
RUST 3-4B3	04			4301331070		FEE	OW	Р
HANSON TRUST 2-32A3	32	0108	030W	4301331072	1641	FEE	OW	Р
BROTHERSON 2-11B4	11	020\$	040W	4301331078	1541	FEE	OW	P

HANSON TRUST 2-5B3	05	0208	020/4/	4301331079	1626	FEE	OW	P	—
	15			4301331079	1	FEE	OW	P	
BROTHERSON 2-15B4								L L	4
MONSEN 2-27A3	27			4301331104		FEE	OW	P	
ELLSWORTH 2-19B4	19			4301331105		FEE	OW	P	
HUNT 2-21B4	21			4301331114		FEE	OW	P	
JENKINS 2-1B3	01			4301331117		FEE	OW	P	
POTTER 2-24B5	24			4301331118		FEE	OW	P	
POWELL 2-13A2 K	13			4301331120		FEE	OW	Р	
JENKINS 2-12B3	12			4301331121			OW	Р	
MURDOCK 2-26B5	26			4301331124		FEE	OW	Р	
BIRCH 3-27B5	27	.1	1	4301331126		FEE	OW	P	
ROBB 2-29B5	29			4301331130			OW	Р	
LAKE FORK 2-13B4	13			4301331134			OW	P	
DUNCAN 3-1A2 K	01	010S	020W	4301331135	10484	FEE	OW	Р	
HANSON 2-9B3	09			4301331136			OW	P	
ELLSWORTH 2-9B4	09	0208	040W	4301331138	10460	FEE	OW	P	
UTE 2-31A2	31	0108	020W	4301331139	10458	FEE	OW	Р	
POWELL 2-19A1 K	19	0108	010W	4301331149	8303	FEE	OW	Р	
CEDAR RIM 8-A	22	0308	060W	4301331171	10666	FEE	OW	Р	
POTTER 2-6B4	06	0208	040W	4301331249	11038	FEE	OW	P	
MILES 2-1B5	01			4301331257			OW	Р	
MILES 2-3B3	03			4301331261			OW	P	
MONSEN 2-22A3	22			4301331265			OW	Р	
WRIGHT 2-13B5	13			4301331267			OW	P	
TODD 2-21A3	21			4301331296			OW	P	
WEIKART 2-29B4	29			4301331298			OW	P	
YOUNG 2-15A3	15			4301331301			OW	P	
CHRISTENSEN 2-29A4	29			4301331303			OW	P	
BLEAZARD 2-28B4	28			4301331304	+		OW	P	
REARY 2-17A3	17		<u> </u>	4301331304			OW	P	
	11			4301331316			OW	P	
LAZY K 2-11B3	+			4301331354	L		OW	P	
LAZY K 2-14B3	14						OW	P	
MATTHEWS 2-13B2	13			4301331357			OW	P	
LAKE FORK 3-15B4	15			4301331358			OW	P	
STEVENSON 3-29A3	29			4301331376				P	
MEEKS 3-8B3	08			4301331377			OW	•	
ELLSWORTH 3-20B4	20			4301331389			OW	P	
DUNCAN 5-13A2	13			4301331516			OW	Р	
OWL 3-17C5	17			4301332112			OW	P	
BROTHERSON 2-24 B4	24			4301332695			OW	P	
BODRERO 2-15B3	15			4301332755			OW	P	
BROTHERSON 2-25B4	25			4301332791			OW	Р	
CABINLAND 2-16B3	16			4301332914			OW	Р	···
KATHERINE 3-29B4	29			4301332923	+		OW	Р	
SHRINERS 2-10C5	10			4301333008			OW	Р	
BROTHERSON 2-26B4	26			4301333139			OW	Р	
MORTENSEN 4-32A2	32	0108	020W	4301333211	15720	FEE	OW	Р	
FERRARINI 3-27B4	27	0205	040W	4301333265	15883	FEE	OW	Р	
RHOADES 2-25B5	25	0208	050W	4301333467	16046	FEE	OW	P	
CASE 2-31B4	31	020S	040W	4301333548	16225	FEE	OW	P	
ANDERSON-ROWLEY 2-24B3	24			4301333616			OW	Р	
SPROUSE BOWDEN 2-18B1	18			4301333808			OW	Р	
BROTHERSON 3-11B4	11			4301333904			OW	Р	
KOFFORD 2-36B5	36			4301333988			OW	P	
ALLEN 3-7B4	07			4301334027			OW	P	No. 10 10 10 10 10 10 10 10 10 10 10 10 10
BOURNAKIS 3-18B4	18	<u> </u>	<u> </u>	4301334091	+		ow	Р	
MILES 3-12B5	12			4301334110			OW	P	
OWL and HAWK 2-31B5	31	·		4301334123	<u> </u>		OW	Р	
	<u> </u>	2200	COUTT	1001007120	1	·		<u> </u>	

OWL and HAWK 4-17C5	17	0206	OFO\A/	4301334193	17207	CEC	OW	Р	
	17 32			4301334193	<u> </u>		OW	P	 -
DWR 3-32B5			t	L				P	
LAKE FORK RANCH 3-22B4	22		+	4301334261			OW		ļ
HANSON 3-9B3	09			4301350065			OW	Р	ļ
DYE 2-28A1	28			4301350066			OW	Р	ļ
MEEKS 3-32A4	32			4301350069			OW	Р	<u></u>
HANSON 4-8B3	08			4301350088			OW	P	С
LAKE FORK RANCH 3-14B4	14			4301350097			OW	Р	
ALLEN 3-9B4	09			4301350123			OW	Р	<u></u>
HORROCKS 4-20A1	20	0108	010W	4301350155	17916	FEE	OW	P	
HURLEY 2-33A1	33	0108	010W	4301350166	17573	FEE	OW	P	
HUTCHINS/CHIODO 3-20C5	20	0308	050W	4301350190	17541	FEE	OW	Р	
ALLEN 3-8B4	08	0208	040W	4301350192	17622	FEE	OW	P	
OWL and HAWK 3-10C5	10	0308	050W	4301350193	17532	FEE	OW	P	1
OWL and HAWK 3-19C5	19	030S	050W	4301350201	17508	FEE	OW	Р	
EL PASO 4-29B5	29		+	4301350208			ow	P	C
DONIHUE 3-20C6	20			4301350270			OW	Р	1=
HANSON 3-5B3	05			4301350275			OW	Р	С
SPRATT 3-26B5	26			4301350302			OW	P	1
REBEL 3-35B5	35			4301350388			ow	P	С
FREEMAN 4-16B4	16			4301350388			OW	P	C
					L		OW	P	C
WILSON 3-36B5	36			4301350439					
EL PASO 3-21B4	21			4301350474	1		OW	P	С
IORG 4-12B3	12			4301350487			OW	P	С
CONOVER 3-3B3	03			4301350526			OW	Р	С
ROWLEY 3-16B4	16			4301350569			OW	P	С
POTTS 3-14B3	14			4301350570			OW	Р	С
POTTER 4-27B5	27			4301350571			OW	P	С
EL PASO 4-21B4	21			4301350572	·		OW	Р	С
LAKE FORK RANCH 3-26B4	26	0208	040W	4301350707	18270	Fee	OW	Р	С
LAKE FORK RANCH 3-25B4	25	0208	040W	4301350711	18220	Fee	OW	Р	С
LAKE FORK RANCH 4-23B4	23	0208	040W	4301350713	18271	Fee	OW	P	С
LAKE FORK RANCH 4-15B4	15	0208	040W	4301350715	18314	Fee	OW	Р	С
LAKE FORK RANCH 3-24B4	24	0208	040W	4301350716	18269	Fee	OW	P	С
GOLINSKI 1-8C4	08	_1		4301350986			OW	Р	С
J ROBERTSON 1-1B1	01			4304730174		FEE	OW	P	+
TIMOTHY 1-8B1E	08			4304730215		FEE	OW	Р	+
MAGDALENE PAPADOPULOS 1-34A1E	34			4304730241		FEE	OW	P	
NELSON 1-31A1E	31			4304730671		FEE	OW	P	+
ROSEMARY LLOYD 1-24A1E	24			4304730707		FEE	ow	P	+
H D LANDY 1-30A1E	30			4304730790		FEE	ow	P	
						FEE	OW	P	+
WALKER 1-14A1E	14			4304730805					ļ
BOLTON 2-29A1E	29			4304731112		FEE	OW	P	
PRESCOTT 1-35Z1	35			4304731173		FEE	OW	P	+
BISEL GURR 11-1	11			4304731213	1	FEE	OW	Р	
UTE TRIBAL 2-22A1E	22			4304731265		FEE	OW	Р	
L. BOLTON 1-12A1	12			4304731295		FEE	OW	Р	
FOWLES 1-26A1	26	010S	010W	4304731296		FEE	OW	Р	1
BRADLEY 23-1	23	0108	010W	4304731297	8435	FEE	OW	Р	
BASTIAN 1-2A1	02	010S	010W	4304731373	736	FEE	OW	P	
D R LONG 2-19A1E	19			4304731470		FEE	OW	Р	1
D MOON 1-23Z1	23			4304731479			OW	P	
O MOON 2-26Z1	26			4304731480			OW	P	
LILA D 2-25A1	25			4304731797			OW	P	+
LANDY 2-30A1E	30			4304731797			ow	P	+
WINN P2-3B1E	03			4304732321			ow	P	+
	- 			4304732321		The second secon	OW	P	+
BISEL-GURR 2-11A1	11	·			+		+		ļ
FLYING J FEE 2-12A1	12	<u>_</u> U108	UTUVV	4304739467	10000	ree	OW	Р	

HARVEST FELLOWSHIP CHURCH 2-14B1	14		<u> </u>	4304739591			OW	Р
OBERHANSLY 3-11A1	11			4304739679			OW	Р
DUNCAN 2-34A1	34			4304739944			OW	Р
BISEL GURR 4-11A1	11			4304739961			OW	Р
KILLIAN 3-12A1	12			4304740226			OW	P
WAINOCO ST 1-14B1	14			4304730818		ML-24306-A	OW	Р
UTAH ST UTE 1-35A1	35			4304730182		ML-25432	OW	Р
STATE 1-19A4	19	010S	040W	4301330322	9118	ML-27912	OW	Р
FEDERAL 2-28E19E	28	050S	190E	4304732849	12117	UTU-0143512	OW	Р
FEDERAL 1-28E19E	28	050S	190E	4304730175	5680	UTU143512	OW	Р
BLANCHARD 1-3A2	03	0108	020W	4301320316	5877	FEE	OW	PA
W H BLANCHARD 2-3A2	03	010S	020W	4301330008	5775	FEE	OW	PA
YACK U 1-7A1	07	010S	010W	4301330018	5795	FEE	OW	PA
JAMES POWELL 3	13		+	4301330024		FEE	WD	PA
BASTIAN 1 (3-7D)	07			4301330026		FEE	OW	PA
LAMICQ-URRUTY 1-8A2	08			4301330036		FEE	OW	PA
BLEAZARD 1-18B4	18	1		4301330059			OW	PA
OLSEN 1-27A4	27			4301330064		FEE	OW	PA
EVANS 1-31A4	31	1		4301330067		FEE	OW	PA
HAMBLIN 1-26A2	26		1	4301330083	L	FEE	OW	PA
HARTMAN 1-31A3	31			4301330093			OW	PA
FARNSWORTH 1-7B4	07			4301330097		FEE	ow	PA
POWELL 1-33A3	33			4301330105		FEE	ow	PA
LOTRIDGE GATES 1-3B3	03			4301330103		FEE	OW	PA
REMINGTON 1-34A3	34		L	4301330117	L	FEE	OW	PA
						FEE	OW	PA
ANDERSON 1-28A2	28			4301330150				PA
RHOADES MOON 1-35B5	35			4301330155		FEE	OW	
JOHN 1-3B2	03			4301330160		FEE	OW	PA
SMITH 1-6C5	06			4301330163		FEE	OW	PA
HORROCKS FEE 1-3A1	03			4301330171		FEE	OW	PA
WARREN 1-32A4	32			4301330174		FEE	OW	PA
JENSEN FENZEL 1-20C5	20			4301330177		FEE	OW	PA
MYRIN RANCH 1-13B4	13			4301330180		FEE	OW	PA
BROTHERSON 1-27B4	27			4301330185		FEE	OW	PA
JENSEN 1-31A5	31			4301330186		FEE	OW	PA
ROBERTSON 1-29A2	29			4301330189		FEE	OW	PA
WINKLER 1-28A3	28			4301330191		FEE	OW	PA
CHENEY 1-33A2	33			4301330202		FEE	OW	PA
J LAMICQ STATE 1-6B1	06			4301330210		FEE	OW	PA
REESE ESTATE 1-10B2	10			4301330215		FEE	OW	PA
REEDER 1-17B5	17			4301330218		FEE	OW	PA
ROBERTSON UTE 1-2B2	02			4301330225		FEE	OW	PA
HATCH 1-5B1	05	020S	010W	4301330226	5470	FEE	OW	PA
BROTHERSON 1-22B4	22	0208	040W	4301330227	5935	FEE	OW	PA
ALLRED 1-16A3	16	0108	030W	4301330232	1780	FEE	OW	PA
BIRCH 1-35A5	35	0108	050W	4301330233	9116	FEE	OW	PA
MARQUERITE UTE 1-8B2	08	0205	020W	4301330235	9122	FEE	OW	PA
BUZZI 1-11B2	11			4301330248			OW	PA
SHISLER 1-3B1	03			4301330249			OW	PA
TEW 1-1B5	01	+	·	4301330264			OW	PA
EVANS UTE 1-19B3	19			4301330265			OW	PA
SHELL 2-27A4	27		+	4301330266			WD	PA
DYE 1-29A1	29			4301330271			OW	PA
VODA UTE 1-4C5	04			4301330283			OW	PA
BROTHERSON 1-28A4	28			4301330292		The same of the sa	OW	PA
MEAGHER 1-4B2	04			4301330292		FEE	OW	PA
NORLING 1-9B1	09			4301330315		FEE	OW	PA
	09			4301330316		FEE	OW	PA
S. BROADHEAD 1-9C5	UB	0303	UJUVV	490 (9909 10	JJ4U	I CL	UVV	

THACTING A GOAG	00	0400	000141	100100001	140000		10141	54
TIMOTHY 1-09A3	09			4301330321			OW	PA
BARRETT 1-34A5	34			4301330323		FEE	OW	PA
MEAGHER TRIBAL 1-9B2	09			4301330325		FEE	OW	PA
PHILLIPS UTE 1-3C5	03			4301330333		FEE	OW	PA
ELLSWORTH 1-20B4	20			4301330351		FEE	OW	PA
LAWSON 1-28A1	28			4301330358		FEE	OW	PA
AMES 1-23A4	23			4301330375		FEE	OW	PA
HORROCKS 1-6A1	06			4301330390		FEE	OW	PA
SHRINE HOSPITAL 1-10C5	10			4301330393		FEE	OW	PA
GOODRICH 1-18B2	18	020S	020W	4301330397	5485	FEE	OW	PA
SWD POWELL 3	13			4301330478		FEE	WD	PA
BODRERO 1-15B3	15	0208	030W	4301330565	4534	FEE	OW	PA
MOON TRIBAL 1-30C4	30	0308	040W	4301330576	2360	FEE	OW	PA
DUNCAN 2-9B5	09	0208	050W	4301330719	5440	FEE	OW	PA
FISHER 1-16A4	16	0108	040W	4301330737	2410	FEE	OW	PA
URRUTY 2-34A2	34			4301330753		FEE	OW	PA
GOODRICH 1-24A4	24			4301330760		FEE	OW	PA
CARL SMITH 2-25A4	25			4301330776		FEE	OW	PA
ANDERSON 1-A30B1	30			4301330783		FEE	OW	PA
CADILLAC 3-6A1	06			4301330834		FEE	ow	PA
MCELPRANG 2-31A1	31			4301330836		FEE	ow	PA
REESE ESTATE 2-10B2	10			4301330837		FEE	OW	PA
CLARK 2-9A3	09			4301330876		FEE	OW	PA
JENKINS 3-16A3	16			4301330877		FEE	OW	PA
CHRISTENSEN 2-26A5	26			4301330905			OW	PA
FORD 2-36A5	36			4301330903		FEE	OW	PA
MORTENSEN 2-32A2	32			4301330911		FEE	OW	PA
WILKERSON 1-20Z1	20			4301330929		FEE	OW	PA
	04			4301330942			OW	PA
UTE TRIBAL 2-4A3 S	<u> </u>							
OBERHANSLY 2-31Z1	31			4301330970		FEE	OW	PA
MORRIS 2-7A3	07			4301330977		FEE	OW	PA
POWELL 2-08A3	08			4301330979	1		OW	PA
FISHER 2-6A3	06			4301330984			OW	PA
JACOBSEN 2-12A4	12			4301330985			OW	PA
CHENEY 2-33A2	33			4301331042	1		OW	PA
HANSON TRUST 2-29A3	29			4301331043		FEE	OW	PA
BURTON 2-15B5	15			4301331044			OW	PA
EVANS-UTE 2-17B3	17			4301331056			ow	PA
ELLSWORTH 2-20B4				4301331090		FEE	OW	PA
REMINGTON 2-34A3	34			4301331091			OW	PA
WINKLER 2-28A3	28			4301331109			OW	PA
TEW 2-10B5	10			4301331125			OW	PA
LINDSAY 2-33A4	33	0108	040W	4301331141	1756	FEE	OW	PA
FIELDSTED 2-28A4	28	010S	040W	4301331293	10665	FEE	OW	PA
POWELL 4-13A2	13	0108	020W	4301331336	11177	FEE	GW	PA
DUMP 2-20A3				4301331505			OW	PA
SMITH 2X-23C7				4301331634			D	PA
MORTENSEN 3-32A2	32			4301331872			OW	PA
TODD USA ST 1-2B1	02			4304730167			OW	PA
STATE 1-7B1E	07			4304730180		FEE	OW	PA
BACON 1-10B1E	10			4304730881		FEE	OW	PA
PARIETTE DRAW 28-44	28			4304731408		FEE	OW	PA
REYNOLDS 2-7B1E	07			4304731840		FEE	OW	PA
STATE 2-35A2	35			4301330156	<u> </u>	ML-22874	ow	PA
UTAH STATE L B 1-11B1	11			4304730171		ML-23655	OW	PA
STATE 1-8A3	08			4301330286		ML-24316	ow	PA
UTAH FEDERAL 1-24B1	24			4304730220		ML-26079	OW	PA
						14-20-462-1329		S
CEDAR RIM 15	34	0305	OOUVV	4301330383	0292	14-20-402-1329	UVV	3

LUTE TOIDAL O 0407	0.4	0000	070144	4004004000	40040	44 00 1100 4405	014/		
UTE TRIBAL 2-24C7	24					14-20-H62-1135		S S	
CEDAR RIM 12	28		1		1	14-20-H62-1323			
CEDAR RIM 16	33					14-20-H62-1328		S	
SPRING HOLLOW 2-34Z3	34	l		4301330234	·	14-20-H62-1480		S	
EVANS UTE 1-17B3	17			4301330274		14-20-H62-1733		S	
UTE JENKS 2-1-B4 G	01	·		l	·	14-20-H62-1782		S	
UTE 3-12B3	12					14-20-H62-1810		S	
UTE TRIBAL 9-4B1	04			4301330194		14-20-H62-1969		S	
UTE TRIBAL 2-21B6	21	J				14-20-H62-2489		S	
UTE 1-33B6	33			4301330441				S	
UTE 2-22B5	22	1				14-20-H62-2509		S	
UTE 1-18B1E	18			4304730969			OW	S	
LAUREN UTE 1-23A3	23	0108	030W	4301330895	9403	14-20-H62-3981	OW	S	
UTE 2-28B6	28	0208	060W	4301331434	11624	14-20-H62-4622		S	
UTE 1-27B6X	27	020S	060W	4301330517	11166	14-20-H62-4631	OW	S	
UTE 2-27B6	27	020S	060W	4301331449	11660	14-20-H62-4631		S	
CEDAR RIM 10-15C6	15	0308	060W	4301330328	6365	14-20-H62-4724	OW	S	
UTE 5-30A2	30	010S	020W	4301330169	5910	14-20-H62-4863	OW	S	
UTE TRIBAL G-1 (1-24C6)	24		1	4301330298		14-20-H62-4866		S	
UTE TRIBAL FEDERAL 1-30C5	30		1	4301330475		14-20-H62-4876		S	
SMB 1-10A2	10			4301330012		FEE	OW	S	
KENDALL 1-12A2	12			4301330013		FEE	OW	S	
CEDAR RIM 2	20			4301330019		FEE	ow	S	
URRUTY 2-9A2	09			4301330046	1	FEE	OW	S	
BROTHERSON 1-14B4	14			4301330051		FEE	ow	S	
RUST 1-4B3	04			4301330063		FEE	ow	S	
MONSEN 1-21A3	21	1		4301330082		FEE	ow	S	
	-			4301330062		FEE	OW	S	
BROTHERSON 1-10B4	10					FEE	OW	S	
FARNSWORTH 1-12B5	12			4301330124				S	
ELLSWORTH 1-16B4	16		I	4301330192		FEE	OW		
MARSHALL 1-20A3	20			4301330193		FEE	OW	S	
CHRISTMAN BLAND 1-31B4	31			4301330198		FEE	OW		
ROPER 1-14B3	14			4301330217		FEE	OW	S	
BROTHERSON 1-24B4	24			4301330229		FEE	OW	S	
BROTHERSON 1-33A4	33			4301330272		FEE	OW	S	
BROTHERSON 1-23B4	23			4301330483		FEE	OW	S	
SMITH ALBERT 2-8C5	08			4301330543			OW	S	
VODA JOSEPHINE 2-19C5	19			4301330553			OW	S	
HANSEN 1-16B3	16		·	4301330617	·		OW	S	
BROTHERSON 1-25B4	25			4301330668		FEE	OW	S	
POWELL 2-33A3	33	010S	030W	4301330704	2400	FEE	OW	S	
BROWN 2-28B5	28	0208	050W	4301330718	9131	FEE	OW	S	
EULA-UTE 1-16A1	16	0108	010W	4301330782	8443	FEE	OW	S	
JESSEN 1-15A4	15			4301330817		FEE	OW	S	
R HOUSTON 1-22Z1	22			4301330884		FEE	OW	S	
FIELDSTED 2-27A4	27			4301330915		FEE	OW	S	
HANSKUTT 2-23B5	23			4301330917			OW	S	
TIMOTHY 3-18A3	18			4301330940		FEE	OW	S	
BROTHERSON 2-3B4	03			4301331008			OW	S	
BROTHERSON 2-22B4	22			4301331086		FEE	OW	S	
MILES 2-35A4	35			4301331087			OW	S	
ELLSWORTH 2-17B4	17	+		4301331089		FEE	OW	S	
RUST 2-36A4	36			4301331092		FEE	OW	S	
EVANS 2-19B3	19			4301331092		FEE	OW	S	
	12			4301331115		FEE	OW	S	
FARNSWORTH 2-12B5							OW	S	
CHRISTENSEN 3-4B4	04	+		4301331142	+			S	
ROBERTSON 2-29A2	29		<u> </u>	4301331150	 		OW	A	
CEDAR RIM 2A	20	0308	UDUVV	4301331172	100/1	rct	OW	S	

El Paso E9 Company, L.P. (N3065) to EP Energy E9 Company, L.P. (N3850) effective 6/1/2012

HARTMAN 2-31A3	31	0108	030W	4301331243	11026	FEE	OW	S
GOODRICH 2-2B3	02	020\$	030W	4301331246	11037	FEE	OW	S
JESSEN 2-21A4	21	0108	040W	4301331256	11061	FEE	OW	S
BROTHERSON 3-23B4	23	020S	040W	4301331289	11141	FEE	OW	S
MYRIN RANCH 2-18B3	18	020\$	030W	4301331297	11475	FEE	OW	S
BROTHERSON 2-2B5	02	020\$	050W	4301331302	11342	FEE	OW	S
DASTRUP 2-30A3	30	010S	030W	4301331320	11253	FEE	OW	S
YOUNG 2-30B4	30	020S	040W	4301331366	11453	FEE	OW	S
IORG 2-10B3	10	0208	030W	4301331388	11482	FEE	OW	S
MONSEN 3-27A3	27	0108	030W	4301331401	11686	FEE	OW	S
HORROCKS 2-5B1E	05	0208	010E	4304732409	11481	FEE	OW	S
LARSEN 1-25A1	25	0108	010W	4304730552	815	FEE	OW	TA
DRY GULCH 1-36A1	36	0108	010W	4304730569	820	FEE	OW	TA

	STATE OF UTAH			FORM 9
ı	DEPARTMENT OF NATURAL RESOUR DIVISION OF OIL, GAS, AND MII		G .	5.LEASE DESIGNATION AND SERIAL NUMBER: FEE
SUNDR	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
Do not use this form for procurrent bottom-hole depth, FOR PERMIT TO DRILL form	pen existing wells below laterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME:		
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: HARTMAN 2-31A3			
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY,		9. API NUMBER: 43013312430000		
3. ADDRESS OF OPERATOR: 1001 Louisiana , Houston,	TX, 77002 713 997-5		DNE NUMBER: Ext	9. FIELD and POOL or WILDCAT: ALTAMONT
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2437 FSL 1505 FWL				COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 31 Township: 01.0S Range: 03.0W Mei	idian	: U	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICA	TE N	IATURE OF NOTICE, REPOR	T, OR OTHER DATA
TYPE OF SUBMISSION			TYPE OF ACTION	
	ACIDIZE	CASING REPAIR		
Approximate date work will start:	CHANGE TO PREVIOUS PLANS		CHANGE TUBING	CHANGE WELL NAME
12/1/2013	CHANGE WELL STATUS		COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT	DEEPEN		FRACTURE TREAT	NEW CONSTRUCTION
Date of Work Completion:	OPERATOR CHANGE	1	PLUG AND ABANDON	PLUG BACK
	PRODUCTION START OR RESUME		RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION		SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR		VENT OR FLARE	WATER DISPOSAL
DRILLING REPORT	WATER SHUTOFF		SI TA STATUS EXTENSION	APD EXTENSION
Report Date:	WILDCAT WELL DETERMINATION		OTHER	OTHER:
12. DESCRIBE PROPOSED OR	COMPLETED OPERATIONS. Clearly show	all ne	ertinent details including dates, d	· <u> </u>
	Please see attached.	p	g =====,	Approved by the Utah Division of Oil, Gas and Mining
				Date: November 20, 2013
				By: Dod K Quit
NAME (PLEASE PRINT) Maria S. Gomez	PHONE NUMB 713 997-5038	BER	TITLE Principal Regulatory Analys	t
SIGNATURE N/A			DATE 10/29/2013	



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Sundry Conditions of Approval Well Number 43013312430000

- 1. Notify the Division at least 24 hours prior to conducting abandonment operations. Please call Dan Jarvis at 801-538-5338.
- 2. Add Plug #3B: A 200' cement plug shall be balanced from 3400' to 3200' to isolate the Base of Moderately Saline Ground Water and the offset Salt Water Disposal zones as required by R649-3-24-3.3.
 - 3. All balanced plugs shall be tagged to ensure that they are at the depth specified.
 - 4. All annuli shall be cemented from a minimum depth of 100' to the surface.
 - 5. Surface reclamation shall be done in accordance with R649-3-34 Well Site Restoration.
 - 6. All requirements in the Oil and Gas Conservation General Rule R649-3-24 shall apply.
- 7. If there are any changes to the procedure or the wellbore configuration, notify Dustin Doucet at 801-538-5281 (ofc) or 801-733-0983 (home) prior to continuing with the procedure.
- 8. All other requirements for notice and reporting in the Oil and Gas Conservation General Rules shall apply.

11/20/2	2013		Wellb	ore Dia	gram				r263
A	PI Well No: 43-0	13-31243-00-00	Permit No:		Well Nam	ne/No: HAI	RTMAN 2-31	A3	
C	ompany Name: I	EP ENERGY E&P (COMPANY, L.P.						
L	ocation: Sec: 31	T: 1S R: 3W Spot:	NESW	String Info	rmation				
C	oordinates: X: 56	62015 Y: 4467040		G	Bottom	Diameter	Weight	Length	Capacity
F	ield Name: ALTA	AMONT		String	(ft sub)	(inches)	(lb/ft)	(ft)	Cupacity (f/(t)
C	ounty Name: DU	JCHESNE		HOL1 COND	207 207	17.5 16	55		
	·			HOL2	5014	13.75	33		
				SURF	5014	10.75	51		1.890
	11 611 0		DI HH	HOL3	12600	8.75			,,,
DUCHR		from 207 ft. to surface		I1	12600	7	23		4-524
	1 1 1 1 1 1	or: 16 in. @ 207 ft.	=(01840)=	HOL4	14595	6			•
1	Hole: 17	7.5 in @ 207 ft	150'	L1	14593	5	18		
			150	* 83/4" x	7"(109	(3)		2	2 4.201
					nole (108				1.979
			#3B	0/9					
	32001	*Add Pla	3400 to 3	2001					
3300 -	3400'	1200' pluj acros	5 BMSGW 3400 to -	erd-					
Buson	~3576		0107	Cement In					
		om 5014 ft. to surface		String	BOC	TOC	Class	Sacks	
		0.75 in. @ 5014 ft. Pt	 #3	COND	(ft sub) 207	(ft sub) 0	T1	775	
4400		5 in. @ 5014 ft. 10		П	12600	7460	G	1050	
į.	- 49501 CUTE 5150	0H 136//1	.05)(1979) = 6654		12600	7460	HC	250	
	5200 5150	10 4 214/(Le	55)(1-840) = 1085K	11	12600	7460	50	750	
5946	Z Sun 0 6350	- Di	- PANEZZZ	L1	14593	12453	G	145	
GRRV	X 4 6400	Pisy	- V	SURF	5014	0	35	2650	
		Below in 50%	(105)(4.524)=115	X SURF	5014	0	G	254	
	1 1		05)(4.201)=4451	k Perforation	Informat	ion			
7460' -			.05)(4.524)=1521	Тор	Bottom	1011			
BL toc for.	- 7478 ot	het inj.	(Tole 620)	(ft sub)	(ft sub)	Shts	/Ft No Sl	its Dt Squ	eeze
₹ P	DOVTE8382	· •	Voil	12460	14476				
alc. upto				11356	12841				
				10692	11220				
9926' -	10450	10650 D.	05)(4.524)= 19. Toke 14						
LUIL	2 10612	0,000	7) [4]	77					
	7 (0612	(Ac14)	05)(4.524)= 19.	5					
BP@112601	>11220		Tore 10	Formation	ہے۔ Informatio	an .	offset	insecto	3
CIBPEILES	11356			Formatio	n Depth	Z ZII		088	= 3576 646 = 3576 646 = 74178 67 = 3860 649 = 3800 631
W/251	Liner from 1	4593 ft. to 12453 ft.		DUCHR	0	PIA 430	1330368	- 3304 N	E - 3576 646
	Cement from	12600 ft. to 7460 ft.		BMSW	3300	PIA 43	01330060	- fo42 NI	M - 3874 - M
	Intermediate	: 7 in. @ 12600 ft.		GRRV	5946	P4A 7 50	0133033	- 173010	F - 3000 to 30
	> Hole: 8.75 in	ı. @ 12600 ft.		GRRVL	9926	r 13		-,, 5	- 1921
				WSTC	11984				
	>12841	amal la Vi							
	A CICRE 12	2870' w/95% belo	w 55x ontop						
	I XI								
	Hole: 6 in. @) 14595 ft.							
	Hole: 6 in. @) 14595 ft.							



10/29/2013

Hartman 2-31A3

API # 43-013-31243

Altamont Field – Duchesne County, Utah

NE/4 - SW/4

Section 31, T 1 S, R 3 W

2437' FSL & 1505' FWL

Lat. = 40°21'5.58"

Long. = -110°16'8.544"

Regulatory

Plug & Abandonment Procedure

CURRENT STATUS:

This well has been shut-in since April 2011 with +/-282 jts 2-7/8" 6.5# 8rd, L-80 tubing. Well blew the stuffing box in 2013 and we tried to flow it back in October '13 with no success.

Bl	Unknown	Casing Flui	Produced Fluid
Bl	Unknown	TD:	14,595′
SI	Unknown	PBTD:	11,285′
SI	Unknown	KB:	6,325′
		GL:	6,303′
		KB-GL:	22′

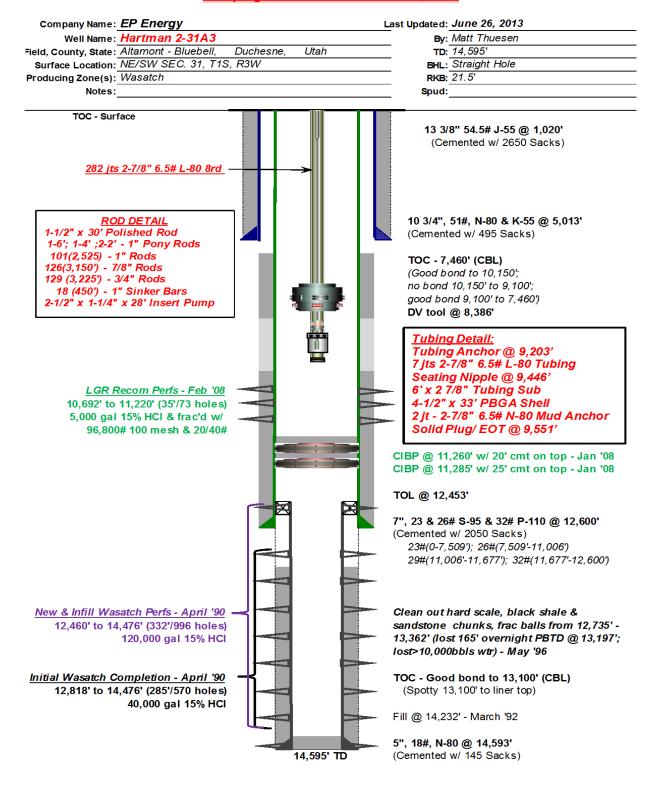
1



10/29/2013

Current WBD

EP ENERGYPumping Schematic as of June 26, 2013

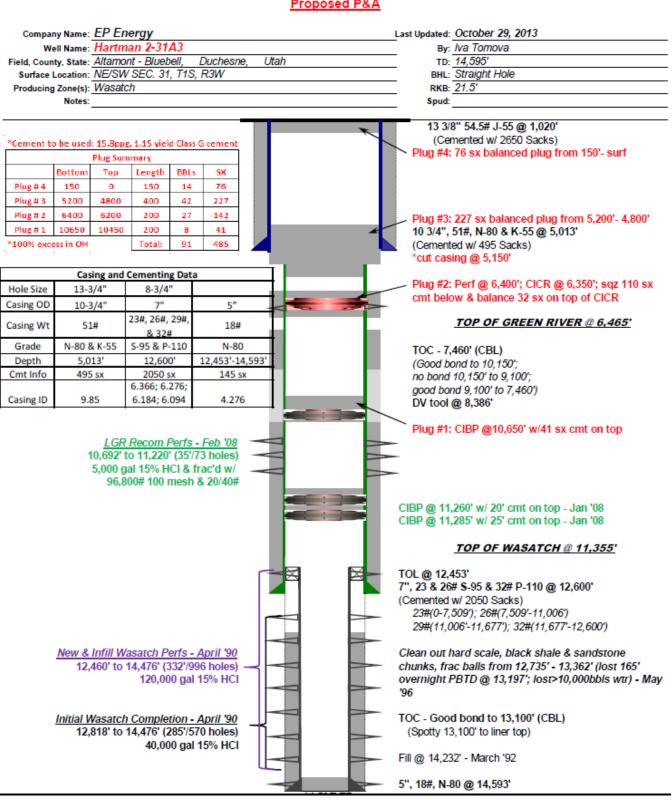




10/29/2013









10/29/2013

Tubular Data

Material	Description	Burst (100%)	Col (100%)	D	Drift ID	Capacity (bbl/ft)	TOC
Surface Casing	10-3/4" 51# N-80 & K-55 @ 5,013'	5860 4030	3220 2700	9.85	9.694	0.0943	Surface
Intermediate Casing	7" 23, 26, & 29# S-95, & 32# P-110 @ 12,600'	7530 8600 9690 12460	5650 7800 7830 10760	6.366 6.276 6.184 6.094	6.241 6.151 6.059 5.969	0.0394 0.0383 0.0371 0.0361	TOC @ 7,460' (CBL)
Production Liner	5" 18# N-80 @ 14,593'- 12,453'	10140	10490	4.276	4.151	0.0178	TOL
Production Tubing	2-7/8" 6.5# L-80 8rd	10570	11170	2.441	2.347	0.0058	N/A

Plug & Abandonment Procedure

- Testing tubing, use workstring and use CIBP/CICR as per Magna's recommendation.
- 1. Notify Dan Jarvis w/ UDOGM @ 801-538-5338 and BLM of P&A operations at least 24 hours prior to start of well work (See Contact List).
- 2. MIRU workover rig. RU Hot Oil Unit and pump hot water down casing to heat up tubing. Unseat pump and flush tubing & rods with hot water. POOH w/rods & pump.
- 3. Send pump in for inspection & rebuild. ND tree and NU and test BOP's to 5,000# for 10 minutes. Have test recorded and charted to be signed and dated by well site supervisor. Record BOP serial number.
- 4. Release tubing anchor at 9,203' and POOH w/282 jts 2-7/8" tbg, scanning for tubing for wear. Lay out all bad joints. Check for NORM (*If no NORM is found, note it in the daily report; If NORM is found in the tubing; Follow EP Energy procedures and chain of custody paperwork for handling, wrapping and transporting NORM tubing to a proper cleaning or disposal site).
- 5. MIRU E-line, RIH w/ GR (check min setting OD on CICR/CIBP to be ran) to 10,670', if tag reach 10,670' then processed to Step 7, otherwise continue with procedure. RD E-line
- 6. PU 6-1/8" RB, 7" 26# casing scraper, 2 x 3 ½" drill collars on 2 7/8" tubing (or 2-3/8 workstring). Work down to top of perfs @ 10,692' and attempt to establish circ with FSW, circ until returns clean. POOH. If perforations take fluid on way in, mix a 10 bbl HEC pill and circulate around or spot as needed.

Plug #1

- 7. PU & MU a 7"- (26#) mechanical set CIBP on the work-string and TIH to ±10,650'. Set CIBP @ ±10,650' (above top of perfs @ 10,692'). Get off of CIBP & establish circulation.
- 8. Mix cement plug with ±41 sacks (±8bbls) of 16.4ppg 1.05 yield Class G cement. Lay in a ±200' balanced cement plug from 10,650' to 10,450' on top of the CIBP.
- 9. Test casing & CIBP to 500# watch for leak off for 15 min.
- 10. PU above cement and Reverse circulate the hole clean; Monitor surface samples of cement to determine when the cement has set up. WOC.
- 11. Run back in and tag plug. If tag is lower than top of proposed plug, contact Houston.
- 12. Circulate around non-corrosive fluid to 6400'. POOH

4



10/29/2013

Plug #2

- 13. RU E-line; PU & MU a perforation assembly; Test lubricator; RIH to ± 6,400'; Pressure up to 500 psig on casing and perforate casing at ±6,400' (above Top of Green River @ 6,465'); POOH. RD ELU.
- 14. PU & MU a 7"- 23# mechanical set cement retainer on the work-string; TIH to ±6,400'; Set cement retainer @ 6,350' (Set 65' above Top of Green River); Establish circulation or injection into perforations. If sufficient injection rate can be established proceed with #14 below. If an acceptable injection rate cannot be established, contact Houston office for instructions.
- 15. Mix and circulate a ±200' In-Out cement plug with ±142 sacks (±27bbls) of 16.4ppg 1.05 yield Class G cement. Pump (±21bbls)(50'+200' outside annulus) below the cement retainer. Sting out of the cement retainer; Lay in the remaining balanced cement plug, (±6bbls)(150') on top of the cement retainer. TOOH with tubing until above cement and Circulate the hole clean; WOC; Monitor surface samples of cment to determine when the cement has set up.
- 16. Run back in and tag plug. If tag is lower than top of proposed plug, contact Houston.
- 17. Circulate around non-corrosive fluid to 5,200'. POOH.
- 18.MIRU E-line. PU & MU 7" jet-cutter assembly; Test lubricator to 250psig/3000psig; RIH to ±5,150; Pressure up to 500psig on casing and jet cut 7" casing at ±5,150'(~137' below surface casing shoe @ 5,013'); POOH. RD ELU.
- 19. Establish circulation down the 7" and up the 7" by 10-3/4" annulus.
- 20.RU 7" casing handling equipment; PU & MU casing spear on tbg; Land and set the 7" csg spear
- 21. POOH & LD 5,150' of 7" csq.
- 22. Check for Norm.

Plug #3

- 23. RIH open ended w/ workstring to 5,200'.
- 24. Mix cement plug with ±227 sacks (±42bbls) of 16.4ppg 1.05 yield Class G cement. Lay in a ±400' balanced cement plug from 5,200' to 4,800' (across surface casing shoe @ 5,013').
- 25. PU above cement and reverse circulate the hole clean; Monitor surface samples of cement to determine when the cement has set up. WOC.
- 26. Run back in and tag plug. If tag is lower than top of proposed plug, contact Houston.
- 27. Circulate around non-corrosive fluid to 150'. POOH & LD tbg.

Plug #4

- 28.RIH open ended to 150'. Mix and circulate a ±150' balanced cement plug from 150' to surface with ±76 sacks (±14bbls) of 16.4ppg 1.05 yield Class G cement. Pump cement from surface until cement returns up the backside. POOH. With 1 jt left, circ around fresh water @ top 5'. WOC; Monitor surface samples of cement to determine when the cement has set up.
- 29. RU casing cutting equipment; Cut the remaining casing at ≥3' below GL



10/29/2013

30. Weld and install dry hole plate. Dry hole plate is to include the following:

1. Well Name: Hartman 2-31A3

2. Operator Name : <u>EP Energy</u>

3. API Number: 43-013-31243

4. Location: NE/4 SW/4 - 31, T 1 S, R 3 W

31. RD&MO rig & clean up location

32. Restore location as directed

	STATE OF UTAH			FORM 9		
1	DEPARTMENT OF NATURAL RESOUF DIVISION OF OIL, GAS, AND M			5.LEASE DESIGNATION AND SERIAL NUMBER: FEE		
SUNDR	RY NOTICES AND REPORTS	S ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
	oposals to drill new wells, significantl reenter plugged wells, or to drill horiz n for such proposals.		7.UNIT or CA AGREEMENT NAME:			
1. TYPE OF WELL Oil Well		8. WELL NAME and NUMBER: HARTMAN 2-31A3				
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY,	L.P.			9. API NUMBER: 43013312430000		
3. ADDRESS OF OPERATOR: 1001 Louisiana, Houston,	TX, 77002 713 997-		NE NUMBER: Ext	9. FIELD and POOL or WILDCAT: ALTAMONT		
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2437 FSL 1505 FWL				COUNTY: DUCHESNE		
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 31 Township: 01.0S Range: 03.0W Me	eridian:	U	STATE: UTAH		
11. CHEC	K APPROPRIATE BOXES TO INDICA	ATE NA	ATURE OF NOTICE, REPOR	T, OR OTHER DATA		
TYPE OF SUBMISSION			TYPE OF ACTION			
	ACIDIZE	A	LTER CASING	CASING REPAIR		
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	□ c	HANGE TUBING	CHANGE WELL NAME		
Approximate date work will start:	CHANGE WELL STATUS	OMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE			
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	□ ы	RACTURE TREAT	NEW CONSTRUCTION		
2/11/2014	☐ OPERATOR CHANGE ✓ PLUG AND ABANDON			PLUG BACK		
	PRODUCTION START OR RESUME		ECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION		
SPUD REPORT Date of Spud:						
	REPERFORATE CURRENT FORMATION		IDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON		
DRILLING REPORT	L TUBING REPAIR		ENT OR FLARE	☐ WATER DISPOSAL		
Report Date:	WATER SHUTOFF		I TA STATUS EXTENSION	APD EXTENSION		
	WILDCAT WELL DETERMINATION	☐ o	THER	OTHER:		
Pull tubing & release TAC @ 9202'. Set CICR @ 10614. Pumped 45 sx 1.05 yield class G cmt balanced plug. Tagged cmt @ 10364' for a 250' cmt plug. Shot 4 perfs @ 6400'. Pumped 45 sx 1.05 yield class G cmt balanced plug. Tagged plug @ 6256'for a 210' plug. Cut casing @ 2860'. TIH to 5101' & pumped 45 sx 1.05 yield class G cmt balanced plug. Tagged plug @ 4907' for a plug of 194'. Tubing to 3402 & pumped 45 sx 1.05 yield class G cmt balanced plug. Tagged cmt top @ 3166' for a 236' plug across salt water disposal zones. Tubing to 2984'& pumped 120 sx 1.05 yield class G balanced plug. Tagged cmt @ 2683' for a 264' plug. TIH to 162' & pumped 85 sx 1.05 yield class G cmt balanced surface plug. Wellhead off & weld on marker plate. See attached for details.						
NAME (PLEASE PRINT) Maria S. Gomez	PHONE NUM 713 997-5038	IBER	TITLE Principal Regulatory Analys	t		
SIGNATURE N/A		\neg	DATE 8/21/2014			

CENTRAL DIVISION

ALTAMONT FIELD HARTMAN 2-31A3 HARTMAN 2-31A3 P&A LAND

Operation Summary Report

Disclaimer: Although the information contained in this report is based on sound engineering practices, the copyright owner (s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

CENTRAL DIVISION

1 General

Customer Information 1.1

Company	CENTRAL DIVISION
Representative	
Address	

1.2 **Well Information**

Well	HARTMAN 2-31A3							
Project	ALTAMONT FIELD Site HARTMAN 2-31A3							
Rig Name/No.	MAGNA/026	Event	P&A LAND					
Start date	1/31/2014	End date	2/12/2014					
Spud Date/Time	9/12/1989	UWI	031-001-S 003-W 30					
Active datum	KB @6,322.7ft (above Mean Sea Level)							
Afe	162163/50190 / HARTMAN 2-31A3							
No./Description								

2 Summary

2.1 **Operation Summary**

Date	1	Гime	Duratio	Phase	Activit	Sub	ОР	MD from	Operation
	Start-End		n (hr)		у		Code	(ft)	·
1/31/2014	14:00	16:30	2.50	MIRU	01		Р		MOVE IN AND RIG UP. SPOT IN EQUIPMENT CHANGE OVER TO PULL RODS
	16:30	17:00	0.50	PRDHEQ	18		Р		UNSEAT ROD PUMP, LAY DOWN POLISH ROD, LAY DOWN 4 1" RODS, PICK UP POLISH ROD. SECURE WELL SHUT DOWN FOR DAY
2/1/2014	6:00	7:30	1.50	WOR	28		Р		CREW TRAVEL, SAFETY MEETING (LAYING DOWN RODS. BODY POSITIONING AND HAND PLACEMENT) FILL OUT AND REVIEW JSA. HOT OIL TRUCK ON LOCATION WORKING ON FLUSHING RODS
	7:30	9:30	2.00	PRDHEQ	06		Р		CONTINUE TO FLUSH RODS WHILE WORKING ROD STRING. FLUSH RODS WITH 70 BBLS TPW.
	9:30	14:30	5.00	PRDHEQ	24		Р		LAY DOWN 101-1" RODS, 126-7/8" RODS, 129-3/4" RODS, 18-1" RODS AND 2 1/2" X 1 1/4" X 28' ROD PUMP. FLUSHING TUBING AS NEEDED TO KEEP RODS CLEAN.
	14:30	18:00	3.50	PRDHEQ	06		Р		CIRCULATE WELL BORE CLEAN COWN TUBING AND UP CASING TO FLOWBACK TANK WITH 300 BBLS TPW. CHANGE OVER TO PULL TUBNG. SECURE WELL. SHUT DOWN FOR WEEKEND
2/2/2014	6:00	17:00	11.00	WOR	18		Р		DOWN FOR WEEKEND
2/3/2014	6:00	17:00	11.00	WOR	18		Р		DOWN FOR WEEKEND
2/4/2014	6:00	7:30	1.50	WOR	28		Р		CREW TRAVEL, SAFETY MEETING (HAND AND BODY PLACEMENT, LAYING DOWN TUBING) FILL OUT AND REVIEW JSA.
	7:30	9:00	1.50	WOR	16		Р		NIPPLE DOWN WELLHEAD AND NIPPLE UP BOP. RIG UP TO PULL TUBING AND RELEASE TAC @ 9202'
	9:00	14:30	5.50	WOR	24		Р		POOH LAYING DOWN 282 JTS 2 7/8" TUBING, 7: TAC, 7 JOINTS 2 7/8" TUBING, 2 7/8" PSN, 6' TUBING SUB, 4 1/2" PBGA, 2 JOINTS 2 7/8" TUBING AND A 2 7/8" SOLID PLUG
	14:30	15:00	0.50	WOR	18		Р		CHANGE OVER TO RUN 2 3/8" TUBING
	15:00	17:30	2.50	WOR	24		Р		PICK UP 6 1/8" ROCK BIT, BIT SUB AND TIH WITH 185 JOINTS 2 3/8" TUBING . EOT @ 6,000'. SECURE WELL. SHUT DOWN FOR DAY
2/5/2014	6:00	7:30	1.50	WBREMD	28		Р		CREW TRAVEL, SAFETY MEETEING (SLIPS, TRIPS AND FALLS, BODY POSITIONING AND FALL PROTECTION) FILL OUT AND REVIEW JSA

RECEIVED: Aug. 21, 2014 August 21, 2014 at 7:31 am

2.1 **Operation Summary (Continued)**

Date	1	ime	Duratio	Phase	Activit	Sub	ОР	MD from	Operation
Date		rt-End	n	Filase	y	Sub	Code	MD from (ft)	Operation
	7.00	0.00	(hr)	WOD	24		P		CONTINUE DIOMNO LID TUDINO DUNININO DIT TO 40 700
	7:30	9:30	2.00	WOR	24 39		P		CONTINUE PICKING UP TUBING RUNNING BIT TO 10,700'
	9:30	12:30	3.00	WOR	27		P		POOH WITH BIT
	12:30	16:00	3.50	WOR			P		PICK UP 7" CICR AND TRIP INTO WELL SETTING PLUG @ 10,614'
	16:00	17:00	1.00	WBREMD	05		Р		PUMP 45 SACK 16.4 PPG, 1.05 YIELD, CLASS G CEMENT BALANCED PLUG.
	17:00	17:30	0.50	WOR	39		Р		POOH WITH 1000' TUBING AND REVERSE CIRCULATE TUBING CLEAN. SECURE WELL, SHUT DOWN FOR DAY
2/6/2014	6:00	7:30	1.50	WOR	28		Р		CREW TRAVEL. SAFE3TY MEETING (RIG UP E/L TRUCK, TRIP TUBING. BODY POSITIONING) FILL OUT AND REVIEW JSA.
	7:30	8:00	0.50	WOR	39		Р		CIRCULATE WELLBORE CLEAN WITH HOT OIL TRUCK TRIP INTO HOLE TAGGING CEMENT @ 10,364' FOR A 250'
	8:00	10:30	2.50	WOR	39		Р		CEMENT PLUG POOH LAYING DOWN TUBING AS NEEDED AND STANDING 6466'
									OF TUBING IN DERRICK
	10:30	11:30	1.00	WLWORK	21		Р		RIG UP E/L TRUCK AND TIH SHOOTING 4 PERF SHOTS @ 6400' POOH AND RIG TRUCKI DOWN
	11:30	12:30	1.00	WOR	18		Р		PRESSURE UP ON CASING TO 1200 PSI AND PRESSURE STABLIZED @ 1000 PSI SHUT IN.
	12:30	13:30	1.00	WOR	44		Р		WAIT ON ORDERS
	13:30	15:00	1.50	WOR	39		Р		TRIP OPEN ENDED INTO WELL TO 6466'
	15:00	15:30	0.50	WBREMD	05		Р		PUMP A 45 SACK 16.4 PPG, 1.05 YIELD CLASS G CEMENT BALANCED PLUG
	15:30	16:00	0.50	WOR	39		Р		POOH WITH 1000' TUBING
	16:00	17:00	1.00	WOR	18		Р		CIRCULATE TUBING CLEAN. SECURE WELL AND WORK IN CELLAR TO PREPARE TO CUT CASING
2/7/2014	6:00	7:30	1.50	WOR	28		Р		CREW TRAAVEL. SAFETY MEETING (CUTTING AND DROPPING CASING, LAYING DOWN CASING. BODY POSITIONING) FILL OUT AND REVIEW JSA
	7:30	8:00	0.50	WOR	39		Р		TRIP INTO HOLE TAGGING PLUG 2 @ 6256' FOR A 210' PLUG.
	8:00	10:30	2.50	WOR	39		P		POOH WITH TUBING
	10:30	12:30	2.00	WBREMD	18		P		NIPPLE DOWN BOP AND WELLHEAD AND CUT WINDOW IN 10 3/4" CASING AND DROP 7" CASING. POOH WITH 7" CASING STUB AND SLIPS.
	12:30	15:00	2.50	WLWORK	18		Р		RIG UP E/L TRUCK AND TIH FREE POINTING AND CUTTING CASING @ 2860' POOH AND RIG DOWN E/L TRUCK
	15:00	16:30	1.50	WBREMD	18		Р		RIG UP TO PULL CASING AND LAY DOWN 4 JOINTS CASING SECURE WELL.
	16:30	17:30	1.00	WBREMD	06		Р		PUMP DOWN 7" CASING AND UP 10 3/4" CASING TO CLEAN CASING. SECURE WELL SHUT DOWN FOR DAY
2/8/2014	6:00	7:30	1.50	PULLCSG	28		Р		CREW TRAVEL, SAFETY MEETING (LAYING DOWN CASING, BODY POSITIONING) FILL OUT AND REVIEW JSA
	7:30	12:00	4.50	PULLCSG	24		Р		POOH LAYING DOWN 66 JOINTS 7" CASING, RIG DOWN CASSING EQUIPMENT
	12:00	13:00	1.00	WBREMD	16		Р		NIPPLE UP BOP, RIG UP TO RUN TUBING
	13:00	14:30	1.50	WBREMD	39		Р		TIH TO 5101'
	14:30	15:00	0.50	WBREMD	05		Р		PUMP A 45 SACK 16.4 PPG, 1.05 YIELD CLASS G CUMENT BALANCED PLUG.
	15:00	15:30	0.50	WBREMD	39		Р		POOH WITH 1000' OF TUBING
	15:30	16:30	1.00	WBREMD	06		P		CIRCULATE WELL BORE CLEAN. SECURE WELL. SHUT DOWN FOR DAY
2/9/2014	6:00	6:00	24.00	WBREMD	18		Р		DOWN FOR WEEKEND
2/10/2014	6:00	6:00	24.00	WBREMD	18		Р		DOWN FOR WEEKEND
2/11/2014	6:00	7:30	1.50	WBREMD	28		Р		CREW TRAVEL. SAFETY MEETING (PUMPING CEMENT AND
	7:30	8:00	0.50	WBREMD	39		Р		LAYING DOWN TUBING) FILL OUT AND REVIEW JSA TRIP INTO WELL AND TAG PLUG 3 AT 4907' FOR A PLUG OF 194'

CENTRAL DIVISION

2.1 Operation Summary (Continued)

Date	Time Start-End		Duratio Phase Acti		Activit	Activit Sub	OP MD from	Operation	
			n		у		Code	(ft)	
	8:00	8:30	(hr) 0.50	WBREMD	24		P		POOH LAYING DOWN TUBING TO 3402'
	8:30	9:00	0.50	WBREMD	05		P		PUMP 45 SACKS 16.4 PPG 1.05 YIELD CLASS G CEMENT
									BALANCED PLUG
	9:00	13:00	4.00	WBREMD	41		Р		POOH LAYING DOWN 1000' OF TUBING AND WAIT ON CEMENT TO CURE
	13:00	13:30	0.50	WBREMD	39		Р		TRIP INTO WELL AND TAG CEMENT TOP ON PLUG 4A @ 3166'
									FOR A 236' PLUG ACROSS SALT WATER DISPOSAL ZONES
	13:30	14:00	0.50	WBREMD	24		Р		POOH LAYING DOWN TUBING TO 2984'
	14:00	15:00	1.00	WBREMD	05		Р		PUMP A 120 SACK 16.4 PPG 1.05 YIELD CLASS G CEMENT BALANCED PLUG
	15:00	16:00	1.00	WBREMD	39		Р		POOH WITH 1000' TUBING AND CIRCULATE WELL CLEAN. SECURE WELL. SHUT DOWN FOR DAY
2/12/2014	6:00	7:30	1.50	WBREMD	28		Р		CREW TRAVEL, SAFETY MEETING (CUTTING OFF WELLHEAD AND RIGGING DOWN) FILL OUT AND REVIEW JSA
	7:30	8:00	0.50	WBREMD	39		Р		TRIP INTO HOLE AND TAG CEMENT ON PLUG 4B @ 2683'
							_		ACROSS 7" CASING STUB FOR A PLUG OF 264'
	8:00	9:00	1.00	WBREMD	24		Р		POOH LAYING DOWN TUBING.
	9:00	10:00	1.00	WBREMD	16		Р		NIPPLE DOWN BOP AND CASING HEAD.
	10:00	11:00	1.00	WBREMD	05		Р		TRIP INTO WELL TO 162' AND PUMP 85 SACK 16.4 PPG 1.05 YIELD CLASS G CEMENT BALANCED SURFACE PLUG. POOH LAYING DOWN 5 JOINTS TUBING.
	11:00	14:30	3.50	WBREMD	18		Р		RIG DOWN RIG, RACK OUT AND RELEASE EQUIPMENT. CUT WELLHEAD OFF AND WELD ON MARKER PLATE. MOVE EQUIPMENT OUT

CENTRAL DIVISION

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